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ABSTRACT

This document reports the oral and written testimony of senators and representatives, administration officials, union officials, contractors' associations, engineers' associations, and construction and consulting companies concerning S. 930, a provision of the Construction Safety, Health and Education Improvement Act of 1989. This provision would mandate: (1) contractor safety and health programs; (2) an onsite project safety and health plan monitored by a construction safety specialist; (3) an improved system for Occupational Safety and Health Administration (OSHA) investigation of fatalities, serious injuries, and structural failures on construction projects; (4) establishment of a rational and coherent inspection targeting system by OSHA; (5) development of a cadre of compliance officers with expertise in recognizing and correcting construction dangers; and (6) establishment of a new office of construction safety, health, and education. Congressional witnesses and administration officials pointed out weaknesses in OSHA staffing and administration, and union officials highly supported the bill to increase safety in the construction industry. Contractors' representatives generally supported more education for the construction industry and OSHA staff but did not want more regulations and offices such as suggested by the proposed legislation. (KC)

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CONSTRUCTION SAFETY, HEALTH AND EDUCATION IMPROVEMENT ACT OF 1989

HEARING

BEFORE THE

COMMITTEE ON LABOR AND HUMAN RESOURCES UNITED STATES SENATE

ONE HUNDRED FIRST CONGRESS

FIRST SESSION

ON

S. 930

TO ESTABLISH A CLEAR AND COMPREHENSIVE PROHIBITION OF DISCRIMINATION ON THE BASIS OF DISABILITY

NOVEMBER 16, 1989

Printed for the use of the Committee on Labor and Human Resources

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CONSTRUCTION SAFETY, HEALTH AND EDUCATION IMPROVEMENT ACT OF 1990

THURSDAY, NOVEMBER 16, 1989

U.S. Senate,
Committee on Labor and Human Resources,
Washington, DC

The committee met, pursuant to notice, at 9:38 a.m., in room SD-430, Dirksen Senate Office Building, Senator Christopher J. Dodd, presiding.

Present: Senators Dodd and Cochran.

Opening Statement of Senator Dodd

Senator Dodd [presiding]. The committee will come to order.

First I'd like to welcome everyone here this morning to the hearing on OSHA, safety in the construction industry, and S. 930, the Construction Safety, Health and Education Improvement Act of 1989. We welcome all of you to the Senate Committee on Labor and Human Resources.

Nineteen years ago, in 1970, Congress passed the Occupational Safety and Health Act to protect the Nation's workers from hazards of the workplace. The Occupational Safety and Health Administration was created and charged with assuring—and I quote—"so far as possible every working man and woman in the Nation safe and healthful working conditions and to preserve our human resources."

To accomplish this goal, OSHA was given broad authority and responsibility to establish health and safety standards, and to enforce them, with civil and criminal penalties. Since the establishment of OSHA, more than 100,000 workers have lost their lives because of unsafe working conditions. It is estimated that each year, between 7,000 and 11,000 workers are killed on the job and thousands more die from long-term effects of occupational illnesses.

In April, 1988, this committee held 3 days of oversight hearings on the effectiveness of the Occupational Safety and Health Administration in carrying out its responsibilities under the OSHA Act. Among other things, those hearings revealed significant problems with OSHA's record in promulgating new health and safety standards and strengthening existing standards.

Subsequently, on April 26 of 1988, I chaired a labor committee hearing which focused on OSHA and worker safety in the construction industry with particular attention to the tragedy of the L'Ambiance Plaza building collapse in Bridgeport, CT. That terrible accident, which occurred on April 23 of 1987, killed 28 people and seriously injured 12 others.

National tragedies such as the L'Ambiance Plaza disaster, as well as the accident at Willow Island in West Virginia 11 years ago in which 51 construction workers perished, draw public attention to the situation facing construction workers.

However, those in the industry are constantly reminded of the unsafe working conditions by the daily occurrence of accidents, injuries and deaths on construction sites. Between 2,500 and 3,000 construction workers die each year in job-related accidents, and thousands more are injured. On the average, every 2 hours, three construction workers are electrocuted, buried alive, crushed, or fall to their death in the United States.

We all know that construction is an inherently dangerous industry. However, there can be no dispute that the current record of the Occupational Safety and Health Administration is less than satisfactory. The number of accidents, injuries and deaths is appalling and should be the concern of every person in this country.

What is so disturbing about the present situation is that is exists notwithstanding Congress' recognition 19 years ago of the need for safety and health legislation in the construction industry.

While blame for the present state of affairs should not be placed wholly on OSHA, it is clear that there are numerous deficiencies in the Occupational Safety and Health Act and in OSHA's administration of that act.

Clearly, we need more vigorous enforcement of existing law by OSHA and stronger standards governing the construction industry and the Federal oversight role with respect to that industry.

The legislation that I have introduced, the Construction Safety, Health and Education Improvement Act of 1989—and I should add that it has been introduced in the House of Representatives by my colleague from Connecticut, Congressman Shays, who will be our first witness this morning—identifies and addresses many of the deficiencies in the OSHA Act as it relates to the construction industry and safety on the construction site.

I am committed to working with the Occupational Safety and Health Administration, construction contractors, construction workers and their unions, engineering professionals, and the legal and insurance professions to fashion legislation which will result in improved safety on construction sites.

We will now receive a statement by Senator Hatch.

[The prepared statement of Senator Hatch follows:]

PREPARED STATEMENT OF SENATOR HATCH

Senator HATCH. I want to thank Senator Dodd for having this hearing to highlight this important issue. There is no question that construction is a dangerous occupation and that we need to do everything possible to make it safer. There is also no question that more needs to be done to address this problem.

In 1988, approximately 34 of every 100,000 construction workers died. That compared with 25 of every 100,000 miners and 24 of every 100,000 workers in the transportation industry and public utilities. The average cost per worker death is approximately

$550,000 in lost wages, medical expenses, insurance administration costs, and indirect costs.

Senator Dodd and I agree on a number of things which could be done to address this problem. First, we both agree that OSHA inspectors who visit construction sites should have special training in construction safety. Second, we both agree that OSHA should do a better job of targeting its inspections.

Third, we both agree that there is a need for some construction site specific regulations and that some of our existing regulations need to be adjusted to take into account the special circumstance found on construction sites. I believe, however, that there are some problems with the legislation he has introduced. I look forward to reviewing the testimony so we can tackle these issues in a constructive way.

I look forward to working with Senator Dodd to draft legislation that will be acceptable to the administration, employers, and employees.

I also want to take this opportunity to welcome Mr. Scannell in his first official appearance before this committee. I am looking forward to working with him as we all work to build on the past successes of OSHA.

Senator Dodd. I want to welcome all of the witnesses who are here this morning. We are fortunate to have a number of highly-qualified individuals who have spent careers working in the construction trades and industries and understand the inherent dangers involved in this particular effort, and we are looking forward to hearing from them.

Our first witness is the Honorable Christopher Shays from the U.S. House of Representatives. Chris Shays represents the 4th Congressional District which encompasses Bridgeport, CT.

Chris has been tireless in his efforts to see this legislation move forward. He has persisted literally on a daily basis over the last year and a half or so to insist that we get hearings and build support for this legislation. Therefore, it is not only appropriate but highly fitting that he be the lead-off witness given the efforts that he has been involved in in the House over these past months.

So Chris, I welcome you here under any circumstance, but particularly in light of your efforts on behalf of this legislation. We look forward to your testimony.

I would just say to you and to all of the witnesses that I will establish as a standard rule here this morning that all of your remarks and statements—and I have read every one of them—will be included in the record in full. I would encourage wherever possible, given the length of some of them, that you try and abbreviate them a bit and get to the key points, because I think some of the most beneficial efforts in our hearing can be the give and take and questioning back and forth on some of the issues that I'll want to raise with you.

So again, Chris, we thank you for being here with us this morning.

STATEMENT OF HON. CHRISTOPHER SHAYS, A REPRESENTATIVE IN CONGRESS, STATE OF CONNECTICUT

Mr. SHAYS. Thank you, Senator Dodd, for your very powerful statement and for inviting me to testify before you.

When L'Ambiance Plaza, a partially built 13-story apartment complex, collapsed on April 23, 1987, as you pointed out, 28 construction workers lost their lives. Every day that goes by, the victims' families must live not only with the loss of their loved ones, but also with the reality that their government has not responded to this tragedy.

This catastrophe, the worst human toll from a construction accident in this decade, resulted from wanton disregard for human life by several companies that engaged in faulty engineering and unsafe construction practices. After extensive investigations and hearings on the cause of the collapse, it became clear that Occupational Safety and Health Administration, OSHA, should have looked inward at its own failings as well.

In an internal OSHA memo dated September 8, 1989, James Stanley, New York Regional OSHA Administrator, acknowledges OSHA must reevaluated its current approach to construction safety. The memo states current OSHA procedures—and I quote—"cannot be effectively applied to construction's transient work force and continually changing environment."

In the memo, top OSHA officials conceded the current inspection system needs improvement. The memo further asserts that emphasis should be placed not on the number of inspections, but rather on their quality. The fact is we need to do a better job in both areas.

It has been more than two years since L'Ambiance Plaza collapsed. Tragically, we have seen little movement to change the factors that contributed to the accident. Twenty-eight workers lost their lives, and since L'Ambiance Plaza, we have lost six more construction workers in Fairfield County alone—six. How many more deaths will we accept before we take action? How much longer do workers have to wait?

Sometimes I think we have come to tolerate death in the workplace as a regrettable but necessary cost of doing business. I reject this notion and submit that murder in the workplace can no longer be tolerated.

We in the Connecticut delegation all support your efforts, Senator Dodd, to pass S. 930, the Construction Safety, Health and Education Improvement Act of 1989, which is identical to its companion bill, H.R. 2254. This legislation identifies and corrects several failings of OSHA to properly carry out its mandate to protect the health and safety of our Nation's workers.

First, OSHA's reporting and notification requirements must be stricter. The Construction Safety, Health and Education Improvement Act of 1989 will require that employers notify OSHA within 24 hours when there is one serious injury, one fatality or a structural failure. Current law only requires notification with 48 hours if there is one fatality or five hospitalizations. Frankly, I don't see why it shouldn't be notified within hours of an accident.

Second, if an accident involving a fatality occurs, OSHA must have the authority to take immediate control of a work site, to secure evidence and oversee rescue operations.

Third, OSHA must be reorganized with a separate division to oversee the construction industry. This legislation will create an Office of Construction Safety, Health and Education, with a specific mandate to oversee construction safety.

Fourth, OSHA must be better-funded and properly staffed, with inspectors specifically trained in construction practices. This legislation will establish a Construction Safety and Health Training Academy to train inspectors and safety specialists.

Fifth, work sites must have properly trained construction specialists to help establish safe working conditions and put an end to dangerous construction practices.

Sixth, the penalties for violating OSHA regulations must be made more stringent. S. 930 will increase the penalty for a willful violation resulting in a serious injury from a maximum of 6 months to a maximum of 5 years' imprisonment. For a willful violation resulting in death, the legislation will increase the criminal penalty from a maximum of a mere 6 months' imprisonment to a maximum of ten years' imprisonment.

Seventh, the OSHA statute must be broadened to enable Federal prosecutors to convict employers of criminal negligence. This change will make it easier to convict those who wantonly disregard workers' safety. The fact is, no one has been convicted and actually served time in prison since OSHA's inception in 1970. There have been 13 convictions; no one has gone to jail. And it is astounding, given the statistic that you just read, Senator Dodd, of 100,000 workers who have lost their lives.

Today we renew our commitment to help assure safe and healthful working conditions for American construction workers. For too long, our government has been silent to the fact that murder in the workplace is allowed, tolerated, accepted—it is condoned.

When construction workers go to their jobs every morning, they face new and different challenges in an ever-changing workplace. They have the right to go to those construction sites with faith—faith that they are being provided a safe working environment. It is up to the employer and the government, through OSHA, to make sure their faith is not misplaced.

Thank you, Senator Dodd.

Senator Dodd. Thank you very much, Congressman Shays.

Before going to a couple of questions for you, I will ask unanimous consent that a statement of Senator Orrin Hatch be included in the record immediately following my opening remarks. Senator Hatch is ranking minority member of the full committee.

I was stunned by a couple of things. One is, of course, the number of 100,000, which you pointed out; also this notion that every 2 hours—maybe that brings it home a little bit more quickly. This hearing will last a couple of hours. By the time this hearing concludes, another person in the construction industry will have lost his life in this country.

But what is more stunning than either of those two statistics is the fact that there hasn't been a single person since the passage of this act that ever has been incarcerated under the penalties currently provided.

How many people have been tried? Do you know the statistics——

Mr. **Shays**. We know that there have been 13 who have been successfully prosecuted, eight in the construction area. But when we asked the U.S. Attorney in Connecticut why did he choose not to prosecute for the wanton disregard of worker safety as it related to L'Ambiance Plaza, his response to us was that he would have had to have proved fairly conclusively that the only reason these workers lost their lives was because of an OSHA violation. So in fact if there were other causes that were serious but not related to OSHA, he could not have convicted them under the statute.

Senator **Dodd**. In other words, if it were 5 percent related to something else and 95 percent to OSHA, in the estimation of the U.S. Attorney—I'm not drawing the conclusion—then in his conclusion, you could not successfully prosecute.

Mr. **Shays**. Exactly And then the other thing we have to look into is that even if you prosecuted, someone would spend six months in prison as a maximum. Our criminal statutes clearly have to be changed.

You may decide in your committee that you want to defer that issue and separate it, to not jeopardize the rest of the bill; but frankly, if we are going to stop the condoning of murder in the workplace, we're ultimately going to have to come to grips with this as well.

Senator **Dodd**. Well, I couldn't agree with you more on that particular point.

You know, of course, that OSHA has indicated that it is categorically opposed to our legislation, and we are going to hear shortly from the folks from OSHA. I am intrigued to see that they are suggesting that some of the things we are proposing here be administratively dealt with. So I am at least optimistic that the statement of being unequivocally opposed to the legislation is not exactly the case, in light of the fact that they may be dealing with some of the suggestions we are making in the bill administratively.

I wonder if you might tell us what you think are the priority issues contained in our legislation; what are the most important things, or the top priorities, regarding construction safety?

Mr. **Shays**. I'll be happy to answer that question, but I just first want to say to you that this bill is very reasonable. There were a lot of things that you could have put in here that some could question, and as far as I'm concerned, what you put in this bill were the priorities.

But having said that, it seems obvious to me that when an accident takes place, it shouldn't be referred to OSHA if there are five injuries or a death. What happens if L'Ambiance Plaza had collapsed, and there had been no workers? The fact is OSHA would have never been notified.

Senator **Dodd**. In fact, were there not at least two incidents in Fairfield County, your Congressional District, involving lift-slab construction within a period of 24 months or less that should have been indications of some problems in this area?

Mr. Shays. Thirty miles from Bridgeport, a year before, Metro Center, lift-slab by the same construction firm, experienced a sagging of one of the floors. A worker lost a finger. The clear fact is, had OSHA been notified of that, it is very likely they would have begun to look at those involved in the construction of lift-slab. And had they looked at what happened at Metro Center, many of us feel L'Ambiance Plaza would never have taken place; 28 people would not have lost their lives.

Senator Dodd. Were there not also, I gather, reports of significant cracks in some of the concrete at the L'Ambiance Plaza site?

Mr. Shays. There were allegations that that took place as well.

Let me also say something else that I just think is incredible. With the disaster that happened in Texas with the petroleum workers, the union had to go to court the next day to go onto the site. And it seems to me so obvious that that shouldn't even have been an issue. Just as with FAA and a serious accident with an airline, you have the site taken over by the government; they control it. And it seems so obvious that should be done, and if that can be done administratively, it should be done tomorrow.

Senator Dodd. Well, very good. Again, I am tremendously grateful to you for the work you have done on this issue already and am hopeful that we'll be able to move the legislation along. Senator Hatch may not be able to make it here this morning. He has two or three other hearings he has to be involved in. And while he is not supportive of this particular effort as it presently stands, he has strongly indicated to me that he would like to work with me on the legislation and make some suggestions. He has certainly indicated that he believes that something needs to be done in this area, whether it is done legislatively or otherwise, but he has indicated a willingness to work with us on this legislation.

I wonder if you might want to just give us a little bit of an update on how things look in the House.

Mr. Shays. I am happy you ask that question. Very candidly, this is what the obstacle is, at least in the House. There are some who know OSHA needs to be reformed. There is no doubt in their minds, but they are very cautious about sending a bill to the floor of the House because they fear that those who want no OSHA might prevail and distort the legislation.

But my attitude is very simply we have a law that isn't working, and it is our obligation to make changes in it. It is our obligation to bring it to the floor of the House and have an honest debate. And I just hope that we aren't reluctant to fight this battle on both floors of the Senate and the House. But that is our obstacle, and obviously, we are going to keep at it. And I can tell you this—I haven't been working every day. You have been gracious. But I am going to keep working on this bill until I see a major change in how OSHA operates.

Senator Dodd. I thank you for that as well, and I thank you for coming by this morning.

Mr. Shays. Thank you, Senator.

Senator Dodd. And if you would like to stay, you can come up and join us here on the dais; we are delighted to welcome you.

Next we'd like to welcome Gerard Scannell, who is Assistant Secretary for Occupational Safety and Health, U.S. Department of

Labor. We thank you for coming by here this morning. We have already indicated how warmly we are receiving you, and I say that sincerely. Obviously, we have some serious questions about this, and you have graciously submitted your testimony in advance, and I appreciate your doing that.

If you'd like to introduce the two people who are with you here this morning and then, as I indicated earlier, we'll accept your testimony in full, and if you'd care to give us a synopsis of that, we can move right along.

STATEMENT OF GERARD F. SCANNELL, ASSISTANT SECRETARY FOR OCCUPATIONAL SAFETY AND HEALTH, U.S. DEPARTMENT OF LABOR, WASHINGTON, DC, ACCOMPANIED BY DR. CHARLES CULVER, DIRECTOR, OFFICE OF CONSTRUCTION, MARITIME AND HEALTH ENGINEERING SUPPORT, AND LEO CAREY, DIRECTOR OF FIELD OPERATIONS

Mr. SCANNELL. Thank you very much, Mr. Chairman.

Not by way of an excuse, because I am going to give you a brief statement and try to answer every question that you have——

Senator DODD. By the way, I am honored that we are the first committee to receive you in a formal status.You were confirmed, I gather, only a couple of weeks ago. Congratulations.

Mr. SCANNELL. Thank you very much. I was just going to remind you that I have been in the position of Assistant Secretary a little over a month, and therefore, I have Dr. Charles Culver, Director of the Office of Construction, Maritime and Health Engineering Support on my left, and Leo Carey, the Director of Field Operations, on my right; if I stumble in answering any questions, they are going to bail me out.

Mr. Chairman, I am happy to be here today to discuss the important issues related to construction workplace safety. My summary statement is very brief, about five minutes, but then I will be happy to answer any questions you might have.

As you are aware, Secretary Dole has made safety and health one of her top priorities. I have spent practically my entire career in positions aimed at improving and assuring safety and health in the workplace, and I am absolutely committed to that goal for OSHA.

Like you, I am appalled at the safety record of the construction industry, which continues to have the highest workplace injury rate of any major sector. OSHA must have an effective program in place to reduce that toll and to prevent tragic accidents like the one that occurred in 1987 at the L'Ambiance Plaza apartment complex in Bridgeport, CT, where 28 workers were killed.

I agree with you that we need to assess OSHA's organization, regulations, budget and staffing, training programs and enforcement capabilities as they relate to the construction industry.

I have read S. 930 and plan to take action on many of those provisions in the bill. In the next few months, I will be working with my staff to determine the best approach. In some instances, we can proceed administratively; in others, we may recommend legislation.

I would like to summarize briefly the progress OSHA has made since your April 1988 hearing and then comment in a very general way on some of the provisions of S. 930.

In the past year and a half, OSHA has issued four final safety standards for the construction industry: an improved standard for concrete and masonry; a standard for use of cranes and derricks as personnel hoists; an updated rule on underground construction and tunnels; and an improved rule for excavation work, including trenching.

We have also proposed a standard for lift-slab construction which would prohibit anyone not directly involved in jacking operations from working in a structure while concrete slabs are being lifted, positioned or welded into place.

In addition, I have assigned high priority to updating the permissible exposure limits for hazardous chemicals used in the construction industry.

In the enforcement area, OSHA has emphasized aggressive enforcement. In fiscal year 1989, OSHA cited employers for more than 37,000 violations that were serious, willful or repeat infractions of agency standards. For these and failure-to-abate violations, OSHA proposed penalties of $16.6 million, an increase of more than 300 percent over the penalties proposed for construction violations 2 years earlier in fiscal year 1987.

With regard to the issue of targeting inspections to the more hazardous work sites, I have asked OSHA's senior managers for their ideas. OSHA's Advisory Committee on Construction Safety and Health has also been asked to assist us in this regard, as well as in reviewing the provisions of S. 930, directed at improving the scheduling of OSHA construction inspections.

I will be reviewing all of these recommendations to see where improvements can be made. I will be meeting with the Construction Safety Advisory Committee in December, and we will discuss S. 930 completely.

Another subject of interest to us and the committee is the professional competence of OSHA's compliance officers. We are concerned as you are that the agency's personnel who inspect construction sites understand the complexities of modern construction, and thus have increased our training of Federal and State compliance officers. We are continually looking for ways to enhance the effectiveness of our training program. And at my request, the Advisory Committee on Construction Safety will also be looking at the content and kinds of courses offered, and they will provide us with their recommendations.

An important action taken by OSHA in 1989 was the establishment of an Office of Construction, Maritime and Health Engineering Support, staffed by senior engineering personnel who provide technical support. As I mentioned, Charlie Culver is with me this morning. Charlie has had a distinguished career in structural engineering and construction and, as the lead structural engineer for the National Institute of Standards and Technology, assisted OSHA in its investigation of the causes of the 1987 collapse of the L'Ambiance Plaza building in Bridgeport, CT.

The new construction office that would be created in OSHA by S. 930 would focus solely on construction and would consolidate all construction-related activities except standard-setting into a single organizational unit. This is a proposal I will be seriously considering in the coming weeks to determine whether such a reorganization would strengthen the OSHA program for the construction industry.

Last week I testified in the House of Representatives regarding the recent industrial workplace accident at the Phillips 66 petrochemical facility in Pasadena, TX. While this is not a construction workplace, many of the same issues of concern to you in the construction industry were discussed. I made several important commitments at that hearing to review OSHA's policies on penalties and accident investigations, including control of the site and employer reporting requirements. I have attached a copy of my November 6th testimony for inclusion in today's record.

That concludes my remarks. I look forward to working with the committee, and I will be happy to answer any of your questions.

[The prepared statement of Mr. Scannell follows:]

Prepared Statement of Gerard F. Scannell

Mr. Chairman and Members of the Subcommittee: Thank you for the opportunity to appear today to discuss the role of the Occupational Safety and Health Administration (OSHA) in investigating the October 23 fire and explosion at the Phillips 66 Company's Houston Chemical Complex in Pasadena, TX.

There have been 19 persons confirmed dead; four are missing and believed to be dead; 124 were hospitalized, and others were injured outside the plant. Excluding construction accidents, this is the single most tragic industrial workplace accident in the history of the Department of Labor's Occupational Safety and Health Administration (OSHA).

Before I describe the agency's response, I want to offer my condolences to the families, friends and coworkers of the employees who died or were injured in this incident. While there is no way that we can lessen their suffering, I can assure them and the Committee that Secretary Dole and I are fully committed to doing everything possible to make certain that a tragedy of this nature is not repeated. In a recent memorandum to President Bush following the incident, Secretary Dole pledged a full and thorough investigation into the accident to determine its causes and whether there were any violations of OSHA regulations. The Secretary has asked that OSHA also prepare a comprehensive report for the President recommending actions that should be taken to prevent or mitigate future accidents of this nature in the petrochemical industry. While the Department of Labor has the primary Federal responsibility for worker safety and health, we recognize that pressing public concerns involving other Federal agencies require us to develop a coordinated Federal response to the incident. In keeping with the Department of Labor's comprehensive legal mandates, expertise and commitment to America's workers, the Secretary has promised therefore that the report to the President will include a complete and coordinated Federal evaluation of this tragic event.

OSHA's Response to the Accident

Keeping in mind OSHA's commitment to worker safety, I will describe in the remainder of my testimony our actions following the accident, the ongoing OSHA activities affecting the chemical processing industry, and the issues which OSHA must address in its report on the accident.

The tremendous fire and explosion at the Phillips 66 chemical complex in Pasadena, TX, occurred at 1:05 p.m. on October 23, 1989. Personnel from OSHA's Area Office in Houston were dispatched to the accident site within an hour, arriving at the scene at 2:25 p.m. The purpose of OSHA's response was threefold: first, to make available to the emergency responders our technical expertise to avert further fatalities and injuries; second, to investigate possible violations of the Occupational Safety and Health Act (OSH Act); and third, to begin an investigation into the causation of the accident. An OSHA team of experts, including structural and chemical engineers and industrial hygienists from OSHA's national office and its Salt Lake City Health Response Team, was also dispatched to the scene. Secretary Dole and I agreed that I should go to the site to assess the situation personally, oversee OSHA's initial response, and assure that a comprehensive investigation is quickly initiated. I can tell you that the explosion and fire caused total devastation to significant portions of the polyethylene unit of Phillips' large chemical complex. The heat and force of the explosion were so tremendous that the steel beams appeared to be a bird's nest of pretzeled metal. A release of hydrocarbon vapor from the polyethylene manufacturing process contacted an ignition source, resulting in a series of explosions. Our investigating team will attempt to determine the location of the release, the ignition source, and the sequence of events leading to the accident. While at the site, I met with company officials and representatives of the two unions at the Phillips facility—the Oil, Chemical, and Atomic Workers and the International Brotherhood of Electrical Workers. These individuals pledged their fullest cooperation with OSHA's investigation. We also met with officials from other agencies, including EPA, the Coast Guard, which provided valuable assistance in assuring the safety of the Houston Ship Channel; the Texas Department of Health; the Harris County Fire Marshal, and other local emergency responders. The Channel Industries Mutual Aid emergency response team, I am told, provided a model response to the accident.

OSHA's Experience with Phillips Petrochemical Facilities

The Subcommittee has expressed an interest in OSHA's experience with Phillips petrochemical facilities. Since 1972, Federal OSHA has conducted 134 inspections at Phillips chemical plants. Of these inspections, 91 were safety inspections, and 43 were health. Approximately one-third (45) were agency-initiated, or "programmed." [1] Thirty-two were conducted in response to accidents, in which 21 fatalities had occurred; 29 were conducted in response to employee complaints, 18 were followup inspections, two were referrals, and nine were various other categories of inspections. Overall, in Phillips chemical facilities, OSHA has found 267 violations, 66 of which were deemed serious; the total penalties proposed for these violations were $37,460.

In the Pasadena, TX, facility, OSHA conducted nine inspections since 1972, one of which (in 1984) was programmed, one was in response to a fatality/catastrophe, one was a follow-up inspection, and six were in response to employee complaints. On these inspections the agency cited a total of 19 violations, for which $1,585 was proposed in penalties. Four of the violations were deemed serious.

The most recent inspection by OSHA of the Phillips facility at Pasadena, TX, took place on August 25, 1989, when OSHA responded to a news media report of an accident at the plant on the previous morning, in which five workers had been hospitalized and one had died. Two contractors were working in close proximity on separate projects: Midwest Metals Company, on "hot work" to demolish a boiler; and Fish Engineering, on cold work to dig up buried metal drain piping, replace it with new piping, and make the necessary connections from the natural gas and off-gas scrubbers to the holding tank. During this work, there was an accidental release of flammable liquids and gases which were ignited and resulted in a flash fire and explosion. OSHA issued a citation for two alleged serious violations to Fish Engineering for not instructing its employees in the hazards associated with the job they were doing at Phillips, and for not using accident prevention tags to warn employees of a hazard. A penalty of $1,440 was proposed to Fish Engineering for those two violations. Phillips 66 Company was also cited for the lack of accident prevention tags, for which a penalty of $720 was proposed. Both companies have contested their citations.

Ongoing Activities Affecting the Chemical Processing Industry

As the Committee knows, there are a number of important activities ongoing in OSHA which affect the chemical processing industry. Chairman Lantos and other members of the committee have, in fact, prior to this accident, expressed interest in many of these.

OSHA has a number of regulations already in place which affect this industry. These include standards for: flammable and combustible liquids; reactive and unstable liquids; the design, installation and operation of storage tanks; fire protection;

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[1] By way of explanation, the U.S. Supreme Court ruled in 1978, in *Marshall* v. *Barlow's, Inc.*, that OSHA is required to select sites for inspection according to rational, neutral schemes that ensure objectivity. The scheme for OSHA's selection of sites for programmed safety inspections in the manufacturing sector is based on the average lost workday injury (LWDI) rates for each industrial sector as estimated annually by the Bureau of Labor Statistics (BLS). Only firms in industrial sectors with higher-than-average LWDI rates are targeted by OSHA for a comprehensive safety inspection. Since most chemical plants fall in standard industrial classifications (SICs) that have lower-than-average LWDI rates, few receive programmed safety inspections. Health inspections are programmed differently, on the basis of past inspection history. Roughly 20 percent of all OSHA inspections are health inspections. In the chemical processing industry it is apparent that most programmed inspections are health inspections.

emergency evacuation plans; firefighting operations; permissible exposure limits for more than 600 air contaminants; respiratory protection requirements; the use of personal protective equipment; and the communication of information about chemical hazards. To complement these general industry standards and enhance their applicability to the chemical industry and to the prevention of catastrophic releases in that industry, OSHA will soon propose a standard for storage, handling, and processing of highly hazardous chemicals. The Notice of Proposed Rulemaking will propose, among other provisions, that employers set up management systems to address the hazards of chemical processes and will include provisions for preventive maintenance, quality control, hazard analysis and employee training. OSHA learned from a pilot program of inspections conducted in the chemical manufacturing industry in 1986 that good safety and health management systems contribute to the effectiveness of the design, operation and maintenance of process systems and backup safety systems. I expect our proposal to be published in the Federal Register next Spring. Following that, I intend to undertake a thorough review of the existing regulations covering hazardous materials, such as compressed gases and flammable and combustible liquids, to revise outdated provisions.

The companies participating, under close OSHA surveillance, in the agency's Voluntary Protection Programs (VPP) are already maintaining hazards process management systems which address the kinds of concerns likely to be covered by the proposed standard. The VPP are a means by which OSHA grants special recognition to corporations that have exemplary safety and health programs with active employee involvement. Participants in the program must conduct intensive worksite analysis to identify potential hazards, and routine site surveillance and preventive maintenance by management and employees to ensure that hazard controls are maintained. In January of this year, OSHA issued voluntary Guidelines on Safety and Health Program Management, to advise all employers concerning the management systems which are required of VPP participants and which are essential to effective worker protection. Chemical processing companies have been particularly enthusiastic participants in the VPP; 24 facilities of 13 such corporations are now members of this elite program. To be accepted into the highest category of the VPP, a participating company not only must have a comprehensive safety and health program, but also must have injury and illness incidence rates which, for three years prior to its entry into the program, have been at or below the national average for its industry. To give an example, last year, the Mobil Chemical plants participating in the VPP had injury and illness rates that were nearly 85 percent below the national average for the chemical industry.

OSHA's Review and Report to the President

As previously stated, the Department of Labor has the primary Federal responsibility under the OSH Act for worker safety and health interests. That act assigns ultimate responsibility for worker safety and health to employers. We have pledged a full and thorough investigation into the accident at the Phillips Petroleum chemical facility to determine causation and any possible violations of the regulations by the employer or its contractors. This comprehensive investigation will review the company's compliance with OSHA's broad workplace regulations as well as specific industry safety and health standards and practices. The final report will recommend actions that should be taken to prevent and mitigate future accidents of this nature in the petrochemical industry.

while it is far too early to lay out for you a comprehensive set of recommendations, I can tell you some of my concerns and raise several important issues which will be addressed in the report:

First, does OSHA need an accident review team, separate from the agency's regional or area office, to investigate and report on accident causation? I certainly believe that OSHA should have an internal Accident Review Team which provides comprehensive and thorough reports to the Assistant Secretary for OSHA on major accidents of this type. Such a team could provide valuable assistance to OSHA's programs for workers' safety and health.

Second, is the OSHA inspection program sufficiently directed to the dangers of the workplace? I am concerned, as I am sure you are, that OSHA had previously cited this facility for a number of serious violations, but had not comprehensively inspected the facility since 1975. I will be looking at the criteria used by OSHA to prioritize inspections. I will also be looking at staffing levels and resources to assure an effective OSHA inspection program.

Third, does OSHA have sufficient guidelines in place to assure an effective and consistently implemented compliance program nationwide? Are the penalty levels providing sufficient incentives for employers to comply with the Act? Do the civil and criminal provisions in the Act need amending? I will be evaluating our enforcement program to determine whether legislative or policy changes are needed. In fact, Secretary Dole has already directed a review of enforcement policy in each of her Labor Department programs.

Fourth, is the contractor/subcontractor relationship sufficiently monitored and regulated to assure safety and health in the workplace? I am aware that the chemical processing industry uses contractors to do hazardous maintenance and construction operations. Apparently a contractor was involved in the Pasadena accident, and we need to look at this issue to determine whether accidents are more prevalent in contractor-operated projects.

Finally, are any additional regulations or guidelines needed at chemical processing plants to assure safe practices, including preparedness for emergencies and emergency response procedures? The issue to be addressed in our report is whether any gaps remain in our protective network of standards for the chemical processing industry—that is, are we on target?

Conclusion

Mr. Chairman and Members of the Subcommittee, these are some of the OSHA activities and processes I will be looking at. The staff of this agency are hard-working, competent and committed to worker safety and health. I am convinced that what is needed is aggressive leadership at the top to assure appropriate regulations, processes, and an adequate budget to effectively provide an ever-safer and more healthful workplace. Secretary Dole, the OSHA team, and I are committed to that. I commend you and the committee for your interest in worker safety and health and for holding these hearings. I look forward to a close and productive partnership.

That concludes my statement, and I will be happy to answer any questions.

Senator DODD. Thank you very much, and of course, we will include a copy of that testimony in the record. I read it last evening as well, and we thank you for bringing that along today.

Let me go over a series of questions with you if I may, Mr. Scannell. Congressman Shays made reference in his statement before the committee a few moments ago to a memo written in September of 1989 by a Mr. John Stanley, who comes from the New England region where in fact the L'Ambiance Plaza tragedy occurred.

He says in that memo, referring to OSHA's current procedures—he says a number of things, and I'd like to go over them with you, if I could. One, he says that OSHA's current procedures—and I quote him here—"cannot be effectively applied to construction." He then goes on to draw several other conclusions. Among the problems that the memo highlights are the following: pressure on OSHA investigators to play "a numbers game" aimed at meeting annual inspection quotas. Inspectors are told to count numerous employers on each construction site as separate inspections. The memo says that this practice can lead to poor-quality inspections—a conclusion of his, I would suggest.

OSHA procedures that allow construction project managers to deny responsibility for safety. Penalties that are too low and fail to deter unsafe practices. Inadequate construction safety rules.

I wonder if you might just comment on those conclusions, if you will?

Mr. SCANNELL. Senator, one of the first things I wanted to do when I got with the agency was to meet with the managers in our organization and to challenge them to come up with new, creative, and innovative ways to do a better job. And James Stanley, the regional administrator in New York, put that together not as a conclusion really for himself, but as issues for us to focus on in working groups in Miami, where we had that meeting. But, in fact, those issues that he raises are legitimate.

I am concerned that, in fact, the targeting method that we are using is not effective, and we challenged the organization to come up with some innovative ways and techniques that we haven't been able to think of in the past to better focus on that.

I am going to ask Leo Carey to elaborate, if you will permit, because he deals directly with the ten regional administrators and is probably the most experienced in how we target and what our plans are to revise our methods of targeting.

Senator **Dodd**. OK, and if you would—because those were the ones that stuck out to me—the ones where he says our penalties aren't stiff enough, we are counting too many employers on the same site—those things that I mentioned, I would like to get a sense from you collectively here whether or not you agree with those conclusions. And what you intend to do about it obviously is my next question, but I want to start out by at least laying some groundwork here and trying to determine whether or not in fact, from your point of view, there is a problem.

So I'd like you to address today, at least at the outset here, whether or not you agree with the conclusions of Jim Stanley—that is, whether OSHA agrees—I am not asking you personally.

Mr. **Carey**. Let me try to clarify that for you, Mr. Chairman. I participated with Mr. Stanley, as co-chairman of the group that put that memorandum together. The memorandum was put together not in the form of conclusions that the task force had, but was put together to stimulate creative thinking, problem-solving at the managers' conference that we were preparing for in October——

Senator **Dodd**. This wasn't a game you were playing.

Mr. **Carey**. No, it was not a game.

Senator **Dodd**. I mean, this wasn't Trivial Pursuit. You weren't just making these up as you went along.

Mr. **Carey**. No. What we did was, for instance, we reviewed your bill, we reviewed other bills, we reviewed criticisms that our constituency groups have had, like the building trades, and we put those criticisms all into the paper for the managers to consider. It wasn't that the task force or even any individual on the task force necessarily agreed with all the criticisms. But, we wanted to have all the criticisms in the paper so that we could have our senior managers look at those criticisms and make recommendations to the organization as a group as to, one, whether or not they were valid, and two, what type of solutions we could come up with if in fact they were valid. But it is inaccurate to say that these are Stanley's conclusions. These are not Stanley's conclusions.

Senator **Dodd**. All right. Then let's go down and take a look at these, having said that. Do you agree, or does OSHA agree, that under the present circumstances that OSHA's current procedures cannot effectively apply to the construction industry?

Mr. **Scannell**. Well, I'm accepting that as,"Yes." I don't think the system right now is the system that we are going to continue with.

Senator **Dodd**. OK. And how about the question of too many employers on the same site, counting them as individual inspections. Is that a problem?

Mr. **Scannell**. I don't see that as a problem. I don't think we should use the numbers to say how effective we are. But we have to account for those as inspections because there may be individual citations for each employer; so we have to count those—but not to use them as a numbers game for the number of inspections that we make.

Senator DODD. How about the question of whether or not penalties are so low they fail to deter unsafe practices; do you generally agree with that?

Mr. SCANNELL. Penalties are inconsistent across the Nation from State plans, to Federal OSHA from regional offices, and Leo is now undertaking an assessment of the penalty structure for me so that I can review it

Senator DODD. Well, were you as surprised as I was when Congressman Shays identified the fact that in 19 years there has never been a single person—not a single person—who has ever done time? Don't you find that alarming?

Mr. SCANNELL. I was very surprised when I saw that

Senator DODD. So to draw a conclusion that the present penalties may not deter unsafe practices would not be an outrageous conclusion to reach in light of that statistic, would it?

Mr. SCANNELL. No, I don't think it would be. Now, we refer cases to Justice, and Justice may choose or not choose toprosecute—and we are looking at that, too, Senator. We are going to work with Justice to see are we doing a good job or are we not doing a good job, and how can we refer more cases and get Justice to accept more cases—legitimate cases

Senator DODD. I appreciate that.

When I read Mr. McMillan's statement that the agency is categorically opposed to S. 930, I shouldn't take that at face value?

Mr. SCANNELL. No, sir, not at all. We have looked very carefully at S.930, and there are many things that wecan do—and I will make changes administratively.

Senator DODD. That's my next question for you. Why don't you take a couple of minutes and sort of outline for us what you plan on doing. This could certainly save ustime—I don't like to introduce bills, and I know Congressman Shays doesn't, just for the sake of it. If we can accomplish some of these goals administratively or otherwise, I am all for it. I don't like having to put my colleagues through a wringer in committee or on the floor or anyplace else for the exercise of it. So if we can get a lot of these things done administratively—I don't want to speak for both of us here—but my inclination would be let's do it that way if we can, where you can do it that way.

So why don't you give us some idea of what your plans are?

Mr. SCANNELL. Well, I thank you for the bill, because it allowed me to focus on some of the issues. I have met with building trade people, I have met with management people, and it is one area where both management and labor agree that something needs to be done.

In addition, I don't think that OSHA's Construction Safety Advisory Committee has been utilized effectively. I am going to be meeting with them in December at their meeting and take your bill and the issues in it, and I am going to go down each one of them and suggest administrative changes that can be made. But I am going to ask them for their recommendations. They are in the industry. They are the workers and they are the management. "What do you think will work? Is 48 hours too long? Is 24 hours too long? Is 8 hours too long? How can you report a fatality to OSHA?" They are the people who are working on those sites day in and day out. They can tell me, "Gerry, we can pick up the phone and call you within an hour." So I'll go right down the list of your provisions in the bill, Senator, and I am going to ask the industry and the workers in the industry to give me their recommendations, because I think I can do those administratively.

If in fact there are provisions that must be done legislatively, I will come back and suggest that

Senator DODD. OK. Would you care to share with us—I think it is a good way to go, and I commend you for that effort—but I would presume, given your own background and experience, that you may have some ideas of your own. I'm not suggesting you are going to be locking them in concrete here, but it would be helpful to the committee if we could at least get some sense of how you see some of these questions. And I will not rigidly hold you to a conclusion you reach here this morning if in fact others can convince you otherwise on that panel, or we can in the Congress. But I'd like to get some sense of how you see some of these questions.

Mr. SCANNELL. Regarding the question of a separateconstruction office, I'm going to look at that, as I said I would in my testimony. Charlie Culver reports directly to me, and he has assured me he is going to take construction on as a serious part of his office. And I told him he is going to get all the support he wants from me.

So from the standpoint of a separate construction office, I'm going to look at that, but I guess I am biased that Charlie is world-recognized as an authority in structural engineering, and his commitment to construction means to me that maybe we don't need a separate construction office.

He has eight registered professional engineers in his organization, and we're going to look at staffing

Senator DODD. Well, let me take them one at a time; let's make it easier for you.

Mr. SCANNELL. OK.

Senator DODD. Let's just take the 48-hour reporting requirement. Now, in this day and age, that seems long to me.

Mr. SCANNELL. That seems long to me, Senator

Senator DODD. And that you need a fatality or five serious injuries requiring hospitalization.

Mr. SCANNELL. Five hospitalizations

Senator DODD. Now, it seems to me you should be able to trigger a mechanism without having those things occur. Do you agree with that?

Mr. SCANNELL. I agree with you

Senator DODD. But what you are saying to me is at this point you are not competent to say what that level ought to be.

Mr. SCANNELL. Twenty-four hours may be too long. I mean, the advisory committee may say we don't have to wait 24 hours, or yes, we do have to wait 24 hours. My initial reaction is to question why.

Senator DODD. Dr. Culver, would you care to comment on this since we have recognized your expertise?

Dr. CULVER. Well, it is obviously important that the event be reported as soon as possible

Senator Dodd. And a lower threshold to require a reporting requirement.

Dr. Culver. Yes, yes, because it is important that we get to the scene, if you will, ASAP, so we can collect some important information, for two reasons—number one, to find out what happened in that particular situation; but equally important is to look at what we can do to prevent that from occurring in the future.

Senator Dodd. One of the trickier areas—that's a relatively easy one; as I move along, they get a little more difficult, so we'll start you on an easy one that I think there is some unanimity of thought on.

The ability of an inspector to shut down a site—this is one that provokes, for obvious reasons, some serious concern from the industry as to what can happen here. Do you really need a court injunction unless there is cooperation from the industry to shut down a site? I'd like to hear your views on whether or not you think the statute ought to be amended to give inspectors that authority to shut down a work site where there is imminent danger to workers.

Mr. Scannell. That is the same question I received from Congressman Shays last week. The point is the act doesn't prohibit us from doing that, and I discussed it with the staff—why don't we just go ahead and assume that authority, and if someone says we don't have the authority, then we'll go and get a court order.

Down in Pasadena, TX, at Phillips Petroleum, there was not a problem. The coroner and the sheriff controlled the site, but they were looking for help, and when Charlie told him, "This is the area I want cordoned off, and I don't want anything moved or touched," there was no problem.

So I think we can just do things ourselves, and where we have a problem, then we can get a court order, Senator. Leo thinks I answered the wrong question—you were talking about imminent danger in shutting it down

Senator Dodd. Yes.

Mr. Scannell. Leo, what are your thought on that?

Mr. Carey. Well, as you know, Mr. Chairman, we have under the act the authority to go to Federal court to get——

Senator Dodd. That can take a little time.

Mr. Carey. That's right. It would need, I believe, legislative change in order to be able to——

Senator Dodd. I've suggested that already. The question is whether or not you'd support it.

Mr. Carey. I think that has to be looked at. Our history is that we don't run across a situation where we find an imminent danger situation where the employer is unwilling to take corrective action immediately. We haven't run across that too often. We have to go to court to get temporary restraining orders maybe a dozen times in a year—I don't have the actual statistics right in front of me. So we are talking about a really finite number of times that we determine it is necessary. Usually when we determine that an imminent danger situation exists, we tell the employer, and the employer takes corrective action or removes the employees from the danger immediately to remove the imminence of the problem. So I'm not sure that the problem is widespread enough to require that kind of legislative action.

Senator Dodd. Well, listen, all of us appreciate here—unfortunately, laws are written not for the majority of people. They are written because of those cases that come along—and thank God they are not the majority—but a case in point: If we agree that there should be a lower threshold for reporting problems, I would presume that we would all agree here as to what allegedly was the case in the case of L'Ambiance Plaza, that lift-slab construction, which was allegedly reported earlier—that a good inspector would say "That's a problem, and I want to take some action here." Now, I can see where the person running that site would say, "That's not enough to warrant shutting this operation down." But the inspector says, "I think it is. We have had problems with lift-slab construction across this country. It is not unique. Now, I'm going to shut it down for a few days until we find out how serious this is." But you end up a court order, and you end up with that being challenged and a variety of other things happen. Arguably, if in fact the crack existed, and had an inspector been able to shut down that operation, arguably, 28 lives might have been saved in that situation.

If we agree that we ought to be able to respond more quickly at the lower threshold, it seems to me that where you don't have a problem would be with the overwhelming majority of contractors, who certainly understand and agree that things need to be checked out and worked on, but for those few who balk and refuse and just don't want to have the government at any level come in and step in in these things, isn't it worth our while to be able to have, at least where imminent danger is involved, that authority, in your view, to be able to shut that down?

Are you agreeing with me? I see your head nodding, but our record is a little unclear——

Mr. Scannell. I tend to agree with you.

Senator Dodd. Let's look at how we word that kind of thing. That one, it appears might be statutory language, because the last thing I want to is to see us having inspectors running around willy-nilly shutting down sites in this country. That doesn't serve anyone's purpose at all.

Mr. Scannell. That's right

Senator Dodd. But we can write it effectively so you can deal with those rare situations—and I believe they are more rare than not, and it seems to be in our interest to do it.

There has been a question of whether or not we ought to have a so-called "bad actor" list of unsafe contractors who could be barred from working on Federally-funded projects. How do you react to that kind of a proposal?

Mr. Scannell. Well, we are looking at how we would identify, quote, the "bad actors", and then if we come up with them, how do we proceed. That is going to be one of the questions to the advisory committee in the industry. I would think the industry would want to be sure that those bad actors are gone; they give a bad name to the industry. So I think that is something I want the advisory committee to give me some advice on.

Senator Dodd. I appreciate that. I'd be interested in hearing what they have to say, too. I think you've got to clearly have a pattern of behavior before you'd fall onto that list, but nonetheless if there is that pattern of behavior—and I presume there are some in the country who fall into that category.

Let me ask the two individuals on your right and left, do you find that you are dealing with a lot of the same people over and over again at OSHA? Are there a lot of repeaters or do you find that it is generally a one-problem kind of an event, and usually that operation cleans up its act and you move on—or do you find yourselves knocking on the same doors with some frequency?

Mr. **Carey**. I think—again, without having specific data, but a general feeling from my experience—that we have repeaters, Senator.

Dr. **Culver**. Yes. Leo is in a better position to comment. I'm not in a position to comment on that

Senator **Dodd**. So something like within a period of time, repeat offenders who are constantly a source of problem, that would be the kind of criterion presumably you'd be looking for, Mr. Scannell?

Mr. **Scannell**. Yes. In preparation for this position, I read GAO reports and IG reports, and it is interesting that where you have the major contractors—the large contractors who work throughout the country—one of our area offices that goes in to inspect a particular construction site in the past may not have been aware that that contractor has had several fatalities. We are trying to coordinate that information system so that they would have that available when they go in, so they know this is not just a contractor in New Jersey, but one that does other work outside, and so we would have a better feel for "the bad actors."

Senator **Dodd**. By the way, I would be very grateful to you if, when you get back your report from those meetings—I presume there will be something prepared——

Mr. **Scannell**. Oh, yes.

Senator **Dodd**. As a result of that—if you could submit a copy of that to the committee.

Mr. **Scannell**. We'd be happy to. [1]

Senator **Dodd**. Maybe we could even get together, formally or informally, to go over some of the ideas. I think that would be very, very helpful.

Mr. **Scannell**. We're glad to do that, Senator.

Senator **Dodd**. A big problem for you—and again, you are new on the job, and since I'm the only member of Congress at this particular moment sitting before you here, I will assume some of the responsibility—but it has to do with the number of inspectors and the level of training. I suspect your answer to me is going to be what we hear from the FDA and a variety of other people, that over the last eight or ten years, given the budget constraints, it has been difficult to maintain levels. So given the fact that Congress is at least 50 percent responsible for that particular problem, I am anticipating an answer from you here, and I know I shouldn't do that. But I wonder if you could give us some idea of how many inspectors OSHA has who are devoted presently specifically to the construction fields.

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[1] On March 15, 1990, the Office of Occupational Safety and Health of the Department of labor advised the committee that the report referred to is not available for the hearing record

Mr. SCANNELL. I'm going to ask Leo to help me, but it is my understanding, Senator——

Senator DODD. Whether or not they are trained—they are specifically in construction, the uniqueness of construction.

Mr. SCANNELL. Yes. Our compliance officers, Senator, are general compliance officers with what I like to call a specialty in construction, where they have gone through the nine or ten construction courses that we have at our training institute.

Leo.

Mr. CAREY. We really don't have construction compliance officers who spend 100 percent of their time in construction. There may be some, but they concentrate——

Senator DODD. Do you have some who are, like for instance in chemicals, or energy, oil and gas—are there people who are specifically trained for those areas?

Mr. CAREY. We have people who train specifically in construction, people who train specifically in chemicals and other areas, but not solely in those areas, and they don't function solely in those areas.

We have people who come out of the construction industry, we have people who come out of the chemical industry, and so forth. And then we train them more in that area, and we train them in other areas. But when they are out actually doing inspections, they are doing a number of different kinds of inspections. Now, construction is probably the one area where they devote a large percentage of their time. We may have a compliance officer who spends 80, 85, 90 percent of his time in construction, but he is available to do other things.

Depending on how they come into the organization determines the amount of training we give them. We have a training institute right outside Chicago, and we have courses specific to the construction industry. We bring in experts from the industry to provide the training. That is not to say, however, that we don't need to look at doing a better job in developing people who can do construction inspections. I think that is something we always have to look at.

By the way, one of the other major topics at our conference was the development of our people, not specific to construction, certainly including construction, but not unique to construction.

In addition, we have expertise at other levels of the organization. As we move up in the organization, we tend to concentrate more expertise, as Mr. Scannell points out. Dr. Culver's office has a number of engineers, and we are not reluctant to go outside the organization to bring in needed expertise to a specific job.

So we do have trained people. Are we happy with that? Well, we probably have to look at it and continue to improve in that area.

Senator DODD. That contracting out, do you do that with the specialists who may come in?

Mr. CAREY. It depends on the need. We'll get chemical engineers or structural engineers, or we may have to contract out to do some special testing of equipment or materials for us. It depends on the need on the specific inspection. In standards development, we do the same thing.

Senator DODD. I'd be very interested in seeing, if I could, how much contracting out OSHA does. This is a subject aside from the particular hearing today that interests me. We talk about—and I have seen it recently with NIH, a totally different subject area—but we have put such constraints on pay raises for these people, we are losing a lot of people. We save money by not paying them, but then we end up paying a lot of money when we go out and hire them as private consultants to do the job that we might have gotten them to do for a modest increase in their salaries. I would be interested in knowing how much OSHA actually contracts out in this area, just as a matter of curiosity.

Mr. SCANNELL. OK, we'll look into that. [2]

Senator DODD. Could you tell me, Leo, in the ideal world, would you have people specialize—if you had an unlimited source of resources—or is that really unnecessary? Can a person be a very good chemical person, construction person, whatever else the categories may be?

Mr. CAREY. Obviously, a person can't be an expert in every area. I think in any realistic world, our role is—through all our standards, training, and enforcement programs, is to encourage the employer to develop the expertise, not for OSHA to have all the expertise in safety and health but to encourage or enforce or compel the employer to have the expertise necessary and to utilize that expertise to empower employees to oversee some of that, because in almost any conceptual world, the government is not going to be able, or maybe even shouldn't be able, to be at every work site all the time. So we really have to empower the work site, whether it is the employer or the employees or a combination, to be able to have the expertise and ensure safety and health in the workplace. I think that should be the thrust of our programs, and I think when you look at it from that standpoint, then the resources needed are within reason to be able to do that kind of job.

Mr. SCANNELL. That will be one of the challenges to the advisory committee, too, Senator, because we believe that is really the way to go—but not just standard by standard; we'll never get the work done going standard by standard—but by developing a safety management—system management—approach to construction as it makes sense in other areas, too. So that it is not just standard by standard. It is requiring them to have a system within their own management to manage safety.

Senator DODD. One of the complaints—and I'm telling you something you have heard from others, I presume, in the past, but we hear this from organized labor—is that the people who are preparing the health and safety standards in the construction fields in far too many cases, if not almost universally, lack onsite experience. I would presume from both the contractor as well as the union person, this is disturbing. You'd like to have people who have had onsite experience before they start writing up standards.

How legitimate is that complaint, and if it is not legitimate, can you site for me the statistics which would indicate to me that in fact the people drafting these standards have onsite experience?

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[2] On March 15, 1990, the Office of Occupational Safety and Health of the Department of Labor advised the committee that the information referred to is not available for the hearing record.

Mr. SCANNELL. It may in fact be true—I don't know—that some of these folks don't have onsite experience——

Senator DODD. It isn't just some; they are saying virtually everybody.

Mr. SCANNELL. Well, maybe in the past. I'd like Charlie to respond, because he now has, within the past year, taken on responsibility for support, not writing standards, but for working with the standards people.

Dr. CULVER. Yes. The title of my office has "support" in it, engineering support, and we do work closely with the standards people. I personally, for example, participated in the hearings we had on our lift-slab standard, and I think I know a little bit about what's going on in lift-slab construction, without being facetious.

We have people in my office who have direct, on-site construction experience. We've got over 100 years of practical experience in addition to the educational backgrounds they have. We are working on the recently developed excavation standard. A Ph.D. in geotechnical engineering in my office is working with the task group that is developing the implementation of that particular standard in the field. So we've got that kind of expertise

Senator DODD. But what concerns them is that in fact it is a Ph.D.—not a guy who has been down in that ditch.

Dr. CULVER. That Ph.D. after he got his Ph.D. has spent 15 years in construction, in design. I have a Ph.D., and I have spent years in construction. So the kind of people we have, in addition to the educational background, also have direct practical experience. That was one of the criteria which I use when we hire them. Almost all of them are registered professional engineers, which means they have proven to the community that they know what is going on in construction.

Senator DODD. You know that wonderful story when John Kennedy was elected President and Lyndon Johnson as Vice President went down and saw Sam Rayburn, and he was just regaling Sam Rayburn with how bright this crowd around Kennedy was—I mean, they had Ph.D.'s, and they knew $10 words, and he just went on and on and on—they all had graduate degrees from Harvard and Yale and were just the most impressive group of people he had ever met.

Sam Rayburn listened to him about a half an hour very patiently and then looked up at Lyndon and said, "You know, I'd feel a hell of a lot more comfortable if just one of them had run for sheriff."

And sometimes I'd feel a hell of a lot more comfortable if maybe some of these guys had—but you are telling me that you have had that experience.

Dr. CULVER. Most of my people are never in the office. They are out in the field with muddy boots

Senator DODD. We're going to hear in a few minutes from the folks from Labor as well, so they may bring this back up, but I am impressed with your answer that people do have the practical experience as well as the other, because it is a matter that has been raised.

Targeting, you addressed earlier, Mr. Scannell. In OSHA, you indicated to me you are evaluating your inspection with respect to targeting sites.

Mr. SCANNELL. Yes, sir, we are.

Senator DODD. Any preliminary decision?

Mr. SCANNELL. No, sir, other than—and I'm not completely conversant with it—but the Dodge reports and the University of Tennessee computer system for using Dodge reports and so forth, aren't the total answer. We found that out because we have been using them. And the feedback from the field at our recent managers conference was that that is not the answer; we still haven't got a good system, so we don't have any preliminary results other than to say the system we're using really isn't the answer.

Senator DODD. Control of the site following an accident. Again, Congressman Shays identified a problem that we have had recently with this, and that is who supervises an accident site. I wonder if you might share with us whether or not you believe OSHA should have the authority to come in and take control of a site following an accident, or should the contractor have that responsibility. What is your view on that, Mr. Scannell?

Mr. SCANNELL. Well, that was the question I was answering earlier—the imminent danger question that you asked. I think we can control a site. The area that we need——

Senator DODD. How about shutting down? That could be cleaned up very quickly. But let's assume that there has been an accident, and it may not have been triggered by anything at all, but an accident has occurred, and you're not shutting down the site. Who should control it?

Mr. SCANNELL. Well, I used the example of Phillips Petroleum. We were able to get in there and control what we wanted to control. I am really not prepared to give you my opinion on that, because I have concerns about what other expertise we may need. I mean, if we control a site, do we have the responsibility for search and rescue and some other things. I have not thought that through completely yet, Senator. But I do want to be able to control what we need to control to make a proper investigation and finding, and it may not be the entire site; it may be just a portion of it.

Senator DODD. I have just gone over a number of questions that obviously relate specifically to the provisions in the House and Senate bills here. And as I have listened to you and to your colleagues here, you indicate to me that you are at least generally supportive of many of the provisions that are in the bill, or at least are not prepared to give an answer as yet until you get some additional information.

What I would like to solicit from you at this point is whether or not you would reject the categorical opposition to the opposition, and you have stated that already; whether or not we can count on you in the next month or two to work with us where necessary, where you cannot accomplish some of these goals administratively, but to work with us to draft language here if necessary to move forward with a piece of legislation to clean up the areas which you have identified this morning as needing that effort.

Mr. SCANNELL. You have my commitment, Senator.

Senator DODD. I appreciate that very much. And I thank both of your colleagues for appearing here with you this morning.

There may very well be some additional questions from either Senator Hatch or other members of the committee, so I would like to leave the record open for that purpose——

Mr. **Scannell**. Do you want us to stay.

Senator **Dodd**. No—unless you are interested in hearing what some of the other folks have to say, and that may be of interest to you.

Mr. **Scannell**. Yes, it will be.

Senator **Dodd**. But other than that, you are free, and you can submit answers to those questions in writing.

We thank you for being here.

Mr. **Scannell**. Thank you very much.

Senator **Dodd**. I'd like to welcome our next panel this morning from Labor, from the Building and Construction Trades Department: Jim Lapping, the Safety Director; Mr. Elihu Leifer, who is counsel; from the Iron Workers, Jim Cole, the General Treasurer and Steve Cooper, who is the Safety Director.

We'd like to welcome you and thank you for taking time out to be with us here this morning. You have had a busy week, with Lech Walesa appearing before the national convention, as well as appearing before Congress yesterday.

Your statements—and I understand we have been shifting a little bit here because of other commitments and so forth—but I have been other some of the testimony and will accept that as if read. You have already had the opportunity here to hear Congressman Shays and Mr. Scannell from OSHA, so you may want to take the opportunity here this morning to even modify your statements based on some of the information you have heard this morning. At any rate, we'll be glad to hear you, and we'll begin with you, Jim Lapping.

STATEMENTS OF JIM E. LAPPING, SAFETY DIRECTOR, BUILDING AND CONSTRUCTION TRADES DEPARTMENT, AFL-CIO, ACCOMPANIED BY ELIHU LEIFER, COUNSEL; AND JAMES COLE, GENERAL TREASURER, INTERNATIONAL ASSOCIATION OF BRIDGE, STRUCTURAL, AND ORNAMENTAL IRON WORKERS, ACCOMPANIED BY STEVE COOPER, SAFETY DIRECTOR

Mr. **Lapping**. Thank you, Mr. Chairman.

I am appearing here on behalf of Robert A. Georgine, President of the Building Trades Department, and on behalf of the approximately six million members of the 15 national and international unions affiliated with the Building and Construction Trades Department. President Georgine's longer statement was delivered to the committee yesterday.

I appreciate the opportunity to appear before this committee to testify on the urgent need for legislation to fulfill for construction workers the promise of the Occupational Safety and Health Act, namely, "to assure so far as possible every working man and woman in the Nation safe and healthful working conditions."

Eleven years ago in 1978, 51 construction workers perished at Willow Island, West Virginia when a cooling tower under construction collapsed. Oversight hearings were held at that time in which the Building Trades Department participated, and it was generally agreed that important changes in administration of the OSHA Act were necessary. Unfortunately, Senator, statutory changes were not made at that time.

In April 1987, as you described earlier, the apartment project in Bridgeport collapsed, killing 28 construction workers. Again extensive hearings were held.

More than two and one-half years have passed since the Bridgeport collapse, and it appears once again that we are no further along than we were 11 years ago after the Willow Island collapse.

The Bridgeport tragedy is gradually fading from the public memory. I ask you, as did Congressman Shays, how many more needless and senseless deaths of construction workers are necessary until the Congress takes action.

Fortunately, earlier this year a good bill, in fact an excellent bill, S. 930, was introduced by yourself. The Congress must not delay in rapidly moving forward this will and its companion bill in the House, H.R. 2254, introduced by Christopher Shays, so that it can be enacted into law during this session.

In the last 2 years, while congressional hearings have focused on occupational safety and health int he construction industry, we have seen and heard OSHA take certain actions and make certain statements in an effort to support its claim that legislation is unnecessary. This claim lacks merit for several reasons.

First, certain important provisions in S. 930, which I will discuss, establish requirements which clearly, OSHA under the present statute, lacks the authority to do.

Second, there are certain beneficial actions which OSHA has just begun to take in its regulatory and administrative functions under the existing act which may be challenged by employers and which the Review Commission and the courts could invalidate. Legislation is necessary to make OSHA's authority clear.

Third, even if the current political appointees within OSHA are well-intentioned and sincere in their interpretation and application of much-needed changes, the next group of OSHA appointees could easily revert to the pre-existing enforcement positions.

The Building Trades Department strongly supports S. 930. It contains most of the essential ingredients to make a significant contribution in enhanced protection for construction workers. Not that any of these provisions are new ideas which have never been tried. To the contrary, there are some States and municipalities and some construction employers, construction managers and construction owners who have adopted these types of requirements. What is necessary is to establish national, uniform requirements and procedures so that worker protection will be improved throughout the country and so that there no longer exists a competitive advantage for contractors who are not interested in the safety and health of their employees and who seek to maximize their profits at the expense of these workers' lives and limbs.

As we see it, S. 930 contains six major elements which, together, will enable the existing sorry state of construction safety and health to turn the corner. They are: mandatory contractor safety and health programs; an on-site project safety and health plan monitored by a construction safety specialist; an improved system for OSHA investigation of fatalities, serious injuries and structural failures on construction projects; establishment of a rational and coherent inspection targeting system by OSHA; development of a cadre of OSHA compliance officers with expertise in recognizing and helping to correct imminent dangers and other hazards on construction sites; and establishment of a new office of construction safety, health and education.

I would like to address each of these in a little more detail.

The aspect of employer safety and health programs. At the present time, Subpart C of the Secretary's construction regulations contains requirements for safety and health programs, supervisor and employee training and "competent persons" to act on behalf of the employer in recognizing and correcting hazards. Unfortunately, the regulations are not as specific as the provisions in S. 930 and have suffered from an absence of enforcement. During the last year or so, there has been some evidence that OSHA is beginning to enforce these provisions. However, we feel it is important for these requirements to be contained in the statute and for them to be set forth with a greater degree of specificity, and this, S. 930 does.

On-site safety and health plans. The bill mandates the oversight of safety and health for the entire project. This is something that has not existed in the past. Under these provisions, there must be designated by the prime contractor or the construction manager an individual referred to in the bill as a "construction safety specialist." I would like to note, Mr. Chairman, that for the past 20 years this requirement in the form of a "competent person" has existed but has not been implemented.

The specialist's job will be to coordinate and monitor safety for the entire project. This individual need not be a professional engineer, but will be an individual who is certified as having expertise in construction safety by reason of having fulfilled the requirements of a standardized training course and testing program which will be developed by the Secretary with the assistance of the Advisory Committee.

This aspect of the bill will make a major contribution in protecting the safety and health of construction workers. One problem which was noted following the Bridgeport collapse was the lack of management accountability for safety in the total construction process on that project. There were several tiers of contractors involved in different operations at Bridgeport, but none—none of them—assumed the responsibility for overseeing safety for the entire project.

To be sure, the present OSHA Act requires every employer must remain responsible for ensuring the safety and health of its own employees. However, beyond this internal management structure, the construction industry requires a management structure that ensures that there is someone on a construction project who is accountable and responsible for overseeing safety on the project as a whole. The present statutory scheme fails to recognize this important fact and fails to address the interrelated nature of the employers' work in this industry.

What was an inadequate structure in this regard when it was enacted in 1970 has become even more inadequate with the more complex management structures in construction. It is possible to find as many as 100 contractors on a single project today. Interestingly, regulations issued under the Construction Safety Act of 1969 did recognize this. They provide that the prime contractor on a job is responsible for the safety and health of all employees performing work under the contract whether or not the prime subcontracts any part of that work. But that legislation applies only to Federal and Federally-assisted construction work, and unfortunately, those regulations have not been enforced even as regards that type of work, probably because the OSHA Act was enacted one year later and applies to construction

The Business Roundtable has recognized that safety on a construction project requires coordination and active oversight no less than does the quality of the construction on the project and its completion in a timely manner. The report states that by applying the principles of management control commonly applied to other aspects of the design and construction process, "owners can help reduce injuries and the loss of billions of dollars needlessly wasted by construction accidents."

Another important issue is the workplace inspection targeting system that you mentioned earlier. The bill requires the Secretary to create a fair and effective system for targeting the most hazardous construction operations as well as employers in the construction projects of owners with the worst safety records and records of noncompliance with OSHA standards and requirements.

The reports which I have just discussed will permit the establishment of such a targeting system. The Secretary will flush out these standards with regulations.

The lack of a rational and effective system of programmed inspections for the construction industry has been one of OSHA's main deficiencies as regards this industry. With the provisions of S. 930 enacted, we are very hopeful that this important aspect of construction safety and health enforcement will be improved.

As to construction inspectors, as you said earlier, one of the longstanding complaints from labor, management and OSHA itself has been the lack of a qualified corps of inspectors with construction expertise. S. 930 addresses this problem. Under the bill, there will be established within OSHA a Construction Safety and Health Training Academy similar to the MSHA Academy, which shall be responsible for the training of construction compliance officers. There has been alluded to and talked about, the Office of Construction Safety and Health Education. While this is certainly a step in the direct direction, it does not go far enough. For the fullest realization of the benefits which will result from S. 930, there must be established a separate construction safety and health administration within the Department of Labor, to be headed by an Assistant Secretary.

Just as Congress recognized in 1977 the special nature of the mining industry and the dangers inherent in the industry required the establishment of a separate administration, Congress should recognize a similar need for the construction industry. We submit that the kinds of substantive improvements that S. 930 embodies, the energy and fresh outlook of a new administration dedicated to construction safety and health is necessary.

I must further note that we have a genuine concern as to how vigorously OSHA would enforce the provisions of this bill, S. 930, in the light of the recent report that then acting OSHA administrator, now Deputy Administrator, Allan McMillan, addressing the annual meeting of the National Constructors Association, stated that the agency, "categorically objects to this bill." I know you covered that earlier, Senator.

In closing, Mr. Chairman, the Building Trades Department believes that this bill is an excellent bill which should be moved forward toward passage without delay. We think the bill could be further improved in a few areas. President Georgine's longer prepared statement discusses two of these areas. With the Chairman's permission, I would like to submit for the record our specific proposals for amendments to what is already a very fine bill, S. 930.

I would also like to submit President Georgine's testimony before this committee last year, as well as the testimony of the presidents of two of our affiliated internationals to the House Committee on Education and Labor.

Thank you, Mr. Chairman.

Senator DODD. Thank you, Jim, for that testimony, and of course, those statements will be included in the record.

I should have pointed out earlier that this is not a bill, and I appreciate the very nice comments about it, but very candidly, Labor looked at this bill and frankly, they weren't all that excited about it at the beginning because it has been the longstanding position of the construction trades to be able to be treated equally along with the mining trades and the like and have a separate department. I made my case to you why I thought that was unrealistic at this time for a number of reasons, but I appreciate very much the fact that in a sense, you have stepped back from a position long held, strongly believed in and given the evidence and the facts over the last 19 years, the number of deaths that have occurred here, make a case that certainly, if that is the standard by which we determine whether or not you need to have a particular focus, then clearly the construction trades would qualify by any normal, common sensical approach to it.

So your support for this legislation I know has not come easily, I guess is what I'm suggesting here, but your strong support for it does make a big difference, and I thank you for your comments and statements.

Mr. Leifer, I don't know whether you have a statement to make, or should we go right to Mr. Cole.

Mr. LEIFER. No, Mr. Chairman, I have no statement.

Senator DODD. OK, fine.

[The prepared statement of Mr. Lapping follows:]

PREPARED STATEMENT OF JIM E. LAPPING

Mr. Chairman and members of the Committee: My name is Jim E. Lapping. I am the Director of Safety and Health for the Building and Construction Trades Department of the AFL-CIO. I am appearing here today on behalf of Robert A. Georgine, President of the Building and Construction Trades Department, and on behalf of the approximately 6 million members of the fifteen national and international unions affiliated with the Building and Construction Trades Department. President Georgine's longer statement was delivered to the Committee yesterday.

I appreciate the opportunity to appear before this Committee to testify on the urgent need for legislation to fulfill, for construction workers, the promise of the

Occupational Safety and Health Act, namely, "to assure so far as possible every working man and woman in the nation safe and healthful working conditions."

Eleven years ago, in 1978, 51 construction workers perished at Willow Island, West Virginia when a cooling tower under construction collapsed. Oversight hearings were held at that time, in which the Building and Construction Trades department participated, and it was generally agreed that important changes in the administration of the OSH Act were necessary. Unfortunately, statutory changes were not made.

In April, 1987, an apartment project in Bridgeport, Connecticut, L'Ambiance Plaza, collapsed killing 28 construction workers. Again, hearings were held.

More than 2½ years have passed since the Bridgeport collapse and, it appears, once again, that we are no further along than we were 11 years ago after the Willow Island collapse. The Bridgeport tragedy is gradually fading from the public memory. I ask you: How many more needless and senseless deaths of construction workers are necessary until the Congress takes action?

Fortunately, earlier this year a Bill, a good Bill, S. 930 was introduced by Senator Christopher Dodd. The Congress must not delay in rapidly moving forward this Bill, and its companion Bill in the House, H.R. 2254, introduced by Christopher Shays, so that it can be enacted into law during this session.

In the last two years, while congressional hearings have focused on occupational safety and health in the construction industry, we have seen and heard OSHA take certain actions and make certain statements in an effort to support its claim that legislation is unnecessary. This claim lacks merit for several reasons.

First, certain important provisions in S. 930, which I will discuss shortly, establish requirements which, clearly, OSHA under the present statute lacks the authority to do.

Second, there are certain beneficial actions which OSHA has just begun to take in its regulatory and administrative functions under the existing Act which may be challenged by employers and which the Review Commission and the courts could invalidate. Legislation is necessary to make OSHA's authority clear.

Third, even if the current political appointees within OSHA are well-intentioned and sincere in their interpretation and application of much-needed changes, the next group of OSHA appointees could easily revert to the pre-existing enforcement positions.

The Building and Construction Trades Department strongly supports S. 930. It contains most of the essential ingredients to make a significant contribution in enhanced protection for construction workers. Not that any of these provisions are new ideas which have never been tried. To the contrary, there are some States and municipalities, and some construction employers, construction managers and construction owners which have adopted these types of requirements. What is necessary is to establish national uniform requirements and procedures so that worker protection will be improved throughout the Country, and so that there no longer exists a competitive advantage for contractors who are not interested in the safety and health of their employees and who seek to maximize their profits at the expense of these workers' lives and limbs.

As we see it, S. 930 contains 6 major elements which, together, will enable the existing sorry state of construction safety and health to turn the corner. They are:

1. Mandatory contractor safety and health programs.
2. An on-site project safety and health plan monitored by a "construction safety specialist."
3. An improved system for OSHA investigation of fatalities, serious injuries, and structural failures on construction projects.
4. Establishment of a rational and coherent inspection targeting system by OSHA.
5. Development of a cadre of OSHA compliance officers with expertise in recognizing and helping to correct imminent dangers and other hazards on construction sites.
6. Establishment of a new office of construction safety, health and education.

I would like to address each of these in a little more detail.

I. *Employer Safety and Health Programs.*

At the present time, Subpart C of the Secretary's construction regulations, which I have already mentioned, contains requirements for safety and health programs, supervisor and employee training and "competent persons" to act on behalf of the employer in recognizing and correcting hazards. Unfortunately, the regulations are not as specific as the provisions in the Bill, and have suffered from an absence of enforcement. During the last year or so, there has been some evidence that OSHA is beginning to enforce those provisions. However, we feel it is important for these requirements to be contained in the Statute and for them to be set forth with a greater degree of specificity. This, S. 930 does.

II. *On-site Project Safety and Health Plan to be Monitored by a Construction Safety Specialist for the Project.*

The Bill mandates the oversight of safety and health for the entire project. Under these provisions, there must be designated by the prime contractor or the construction manager, if there is one, an individual referred to in the Bill as a "construction safety specialist" whose job it will be to coordinate and monitor safety for the project. This individual need not be a professional engineer but will be an individual who is certified as having expertise in construction safety by reason of having fulfilled the requirements of a standardized training course and testing program which will be developed by the Secretary with assistance of the Advisory Committee.

This aspect of the Bill will make a major contribution in protecting the safety and health of construction workers. One problem which was noted following the L'Ambiance collapse, was the lack of management accountability for safety in the total construction process on that project. There were several tiers of contractors involved in different operations at Bridgeport but none of them assumed the responsibility for overseeing safety for the entire project.

To be sure, as the present OSH Act requires, every employer must remain responsible for ensuring the safety and health of its own employees. But, beyond this internal management structure, the construction industry requires a management structure that ensures that there is someone on a construction project who is accountable and responsible for overseeing safety on the project as a whole. The present statutory scheme fails to recognize this important fact and fails to address the inter-related nature of the employers' work in this industry. What was an inadequate structure in this regard when it was enacted in 1970 has become even more inadequate. It is possible to find as many as 100 contractors on a large project today. Interestingly, regulations issued under the Construction Safety Act of 1969 did recognize this. They provide that the prime contractor on a job is responsible for the safety and health of all employees performing work under the contract whether or not the prime subcontracts any part of that work. But that legislation applies only to Federal and federally-assisted construction work, and, unfortunately, those regulations have not been enforced even as regards that type of work, probably because the OSH Act was enacted one year later and applies to construction.

The Business Roundtable has recognized that safety on a construction project requires coordination and active oversight no less than dues the quality of the construction on that project and its completion in a timely manner. The 1983 report of the Business Roundtable's Construction Industry Cost Effectiveness Project found that owners of construction projects paid $8.9 billion (in 1979 dollars) in direct and indirect costs of preventable workers' injuries. This constituted 6½ percent of the $137 billion dollar total cost of industrial, commercial and power plant construction in that year. The report states that by applying the principles of management control, commonly applied to other aspects of the design and construction process, "owners can help reduce injuries and the loss of billions of dollars needlessly wasted by construction accidents."

III. *OSHA Investigations of Fatalities, Serious Injuries, and Structural Failures.*

At the present time, as you know, OSHA's reporting system requires reporting by an employer only in the event of a fatality or an incident resulting in serious injuries to at least five employees. As prior congressional hearings have revealed, had there been a requirement for reporting a serious injury to only one employee, or for reporting a structural failure, the Bridgeport tragedy probably would not have occurred; for, a month or so prior to the tragedy a similar but less drastic failure in the same lift-slab construction process being used, resulted in the severing of an employee's finger. Another problem with the present reporting system is that it is limited to individual employers with no regard for the construction project as a whole.

Under the Bill, a revised reporting system will result in substantial improvement in terms of meaningful government investigations of construction projects. An employer would be required to report within 24 hours after any fatality, serious injury, or structural failure resulting in a collapse or near collapse. A follow-up report by the employer containing certain additional information would also be required. The Secretary would be required to conduct an inspection within 24 hours after receipt of the initial report unless it was determined that conditions at the site made an inspection dangerous.

The Bill also provides for reports to be filed by the construction safety specialist at the completion of a construction project or at intervals of one year, whichever occurs earlier. The report would contain information regarding any fatalities or serious injuries which had occurred on the project. This cross reporting system by employer and construction safety specialist will provide information which will enable the Secretary to establish an effective set of priorities for programmed inspections. (In addition, the reports will prove useful to OSHA in conducting training and education programs and in promulgating new standards.)

IV. *Workplace Inspection Targeting System.*

The Bill requires the Secretary to create a fair and effective system for targeting the most hazardous construction operations, as well as employers, and the construction projects of owners, with the worst safety records and records of non-compliance with OSHA standards and requirements. The reports which I have just discussed will permit the establishment of such a targeting system. The Bill defines in general terms the standards upon which priorities will be established. The Secretary will "flesh out" these standards in regulations.

The lack of a rational and effective system of programmed inspections for the construction industry has been one of OSHA's main deficiencies as regards this industry. In part, this deficiency has resulted from the lack of adequate reports. With the provisions of S. 930 enacted, we are very hopeful that this important aspect of construction safety and health enforcement will be improved.

V. *OSHA Construction Inspectors.*

One of the longstanding complaints from labor, management and OSHA itself has been the lack of a qualified corps of inspectors with construction expertise. S. 930 addresses this problem. Under the Bill, there will be established within OSHA a Construction Safety and Health Training Academy which shall be responsible for the training of construction compliance officers.

VI. *Office of Construction Safety, Health and Education.*

While this is certainly a step in the right direction, it does not go far enough. For the fullest realization of the benefits which will result from S. 930, there must be established a separate construction safety and health administration within the Department of Labor, to be headed by an Assistant Secretary.

Just as Congress recognized in 1977 that the special nature of the mining industry and the dangers inherent in that industry required the establishment of a separate administration, Congress should recognize a similar need for the construction industry. We submit that with the kinds of substantive improvements that S. 930 embodies, the energy and fresh outlook of a new administration, dedicated to construction safety and health is necessary. I must further note that we have a genuine concern as to how vigorously OSHA would enforce the provisions of this Bill in the light of the recent report that then acting OSHA administrator, now Deputy Administrator, Allan C. McMillan, addressing the annual meeting of the National Constructors Association, stated that the Agency "categorically objects to this Bill."

In closing, Mr. Chairman, the Building and Construction Trades Department believes that the Bill is an excellent Bill which should be moved forward toward passage without delay. We think the Bill could be further improved in a few areas. President Georgine's longer, prepared statement discusses two of these areas. With the Chairman's permission, I would like to submit for the record our specific proposals for amendments to what is already a very fine Bill, S. 930.

I would also like to submit President Georgine's testimony before this Committee last year, as well as the testimony of the presidents of two of our affiliated Internationals to the House Committee on Education and Labor.

Thank you.

Prepared Statement of Robert A. Georgine, President, Building and Construction Trades Department, AFL-CIO

Mr. Chairman and members of the Committee: My name is Robert A. Georgine. I am President of the Building and Construction Trades Department of the AFL-CIO. I am appearing here today on behalf of the approximately 6 million members of the 16 national and international unions affiliated with the Building and Construction Trades Department.

Thank you very much for inviting me to appear before this Committee to testify on the present status of the Occupational Safety and Health Administration. My expertise and concern is in the building and construction industry and my remarks will be addressed to OSHA's record of improving safety and health in that industry and to offering practical solutions to the growing number of problems.

There can be no dispute that the current record of occupational safety and health in the construction industry is horrendous. The number of accidents, injuries and deaths is appalling and should be of concern to every person in this Nation. What is so disturbing about the current situation is that it exists notwithstanding Congress' recognition 18 years ago of the need for safety and health legislation in the construction industry. Eighteen years of Federal legislation, frankly, has not worked and it is necessary for Congress to re-evaluate the situation and determine what must be done to turn this situation around. I hope this hearing is a positive step in that direction.

As I mentioned, federal legislation of occupational safety and health in the construction industry began some 18 years ago. In 1969, Congress enacted the Construction Safety Act. This Act was limited to Federal, federally financed or federally assisted construction. It was enacted in recognition of the magnitude of the problem facing the construction industry in terms of safety and health issues. It is interesting to examine the statistics cited in the Senate Report as having justified the need for that law. Those statistics showed that the construction industry had an accident frequency rate that was almost twice the all-industry rate. They showed that over 20 percent of the workers killed yearly and over 11 percent of the workers disabled in on-the-job accidents were in the construction industry. They showed that the 2,800 construction workers killed on the job in 1968 represented the highest death rate for any industry in the United States. They showed that since 1959 there had never been less than 2,300 construction workers killed and 209,000 construction workers disabled each year. They showed that the construction industry employed 4 million workers and that another 20 million workers depended on the construction industry. That number represented one-third of the nation's workforce. Finally, the statistics showed that the annual economic dollar value of the construction industry was 10 percent of the gross national product or 91 billion dollars and that work accidents cost approximately 3 billion dollars per year.

As impressive as the above figures are, they represented only a conservative estimate of the number of deaths and injuries. As noted during the debate on the 1969 bill, statistics only reflected the lowest estimates since there was no system to accurately report deaths and injuries.

Soon after the Construction Safety Act became law, Congress enacted the Occupational Safety and Health Act of 1970. Adoption of regulatory standards in the enforcement of safety and health in the construction industry has since been covered by the Occupational Safety and Health Act. OSHA, however, applies to occupational safety and health in all industries and the Act does not differentiate between the construction industry and other industries. Federal and federally assisted construction, which makes up 25 percent of the construction industry and employs one million workers, still falls under the concurrent jurisdiction of the 1969 Act, but those workers are not reaping the benefits of that Act due to the administration of OSHA.

The legislation described above as not led to the creation of safe or even safer workplaces in the construction industry. In 1969 when the Construction Safety Act was enacted, construction workers constituted 4 percent of the total workforce and accounted for 15 percent of the total fatalities. Today, construction workers constitute 5 percent of the workforce and account for 26 percent of the fatalities. Similarly, a comparison of the statistics cited by the Senate in 1969 with the same statistics today shows that there is an even greater need for more effective regulation of safety and health today than there was in 1969. Congressman Biaggi's prediction in 1969 has come true. He stated that "[i]f effective action is not taken, the record is going to get worse, not better." Effective action has not been taken and the record is worse. At the risk of being redundent, I repeat his warning today. If effective action is not taken, the record is going to get worse not better.

The Department has become very active in the legislative field in order to do what it can to make construction worksites safe places to work. I recently testified on OSHA and the construction industry before the House Subcommittee on Health and Safety and presented the same proposed legislation that I will address later in my remarks. The Department also testified before the House Employment and Housing Subcommittee in support of the use of criminal sanctions for occupational safety and health violations. The Department advocated vigorous enforcement of criminal sanctions, where needed, by Federal, state and local law enforcement agencies and also supported the enactment of H.R. 2664, the "Corporate Criminal Liability" bill. A copy of the testimony is attached. Along the same lines, the Department has actively lobbied for stronger enforcement mechanisms by testifying in support of S. 1014, the "Federal Civil Penalties Inflation Adjustment Act of 1987", which would have the effect of indexing Federal civil penalties to inflation. Enactment of this legislation would increase OSHA penalties and act as a greater deterrent to safety and health violations. Finally, the Department has worked closely with Senator Weicker and his staff on S. 2086, a bill to set up a trust fund with the money collected by OSHA in litigation over the collapse of L'Ambiance Plaza in Bridgeport, CT. The trust fund will be used to assist the victims of that collapse.

The pending pieces of legislation are beneficial and they address urgent needs in the industry. The problem, however, is so basic and broad-reaching that the Department feels only a comprehensive overhauling and restructuring of OSHA will achieve the desired result—a safe and healthful workplace.

Blame for the present tragic state of affairs should not wholly be placed on the Occupational Safely and Health Administration. It is all too easy for unions and employers to point to OSHA when accidents occur and say that the agency failed to prevent the accident. But OSHA did not cause that accident, and its inabilities to prevent accidents and to deter employers from creating unsafe workplaces are not entirely of its own making; its hands are tied by inadequate legislation and insufficient resources. Although the Building and Construction Trades Department is not always in support of the Occupational Safety and Health Administration, we do recognize that OSHA is well intentioned and is committed to workers' safety and health.

If blame is to be assessed, the owners and contractors must shoulder a great part of that blame. It is their responsibility to ensure that employees are furnished a safe workplace and are trained in the proper techniques to recognize and avoid hazards.

What is more important than assessing blame, however, is figuring out why the present legislative scheme is not working and determining what can be done to guarantee a safe and healthful workplace for construction employees. I cannot begin to enumerate all the specific deficiencies in the Occupational Safety and Health Act or in the administration of that Act. I can, however, make some general observations that might assist you in understanding what some of the basic problems are in the construction industry today and how they can be remedied by further legislation.

I want to focus on a concrete example to bring these problems home to you. You are all undoubtedly aware of the tragic accident that occurred in Bridgeport, CT, last April. L'Ambiance Plaza, an apartment project in Bridgeport, collapsed killing 28 workers. Before discussing the particulars of the problems at Bridgeport, I would like to express some reservation about focusing on this catastrophic accident. Just as in the airline industry where a major plane crash captures all the media attention, highlighting construction accidents like the one in Bridgeport tends to diminish the significance of the thousands of "smaller" accidents resulting in deaths and serious injuries. All construction accidents are of enormous concern to me and the Building and Construction Trades Department. My remarks about Bridgeport must not be taken to mean that I place greater importance or emphasis on accidents that only capture the media's attention. Nonetheless, accidents of the sort that occurred at Bridgeport do open the Nation's eyes to the dangers in the construction industry and I could like to believe that something of value could come out of something so tragic.

Before addressing myself to the unsafe conditions at Bridgeport, I must also extend my personal thanks, and I hope you will give special recognition, to the building tradesmen in Bridgeport and those who traveled from elsewhere for their leadership and efforts in the rescue operations. Their volunteer efforts to save their brothers at considerable personal risk was truly heartwarming. Now, onto my discussion of the problems at Bridgeport.

One reported problem at Bridgeport that is illustrative of perhaps the largest problem in the construction industry was the lack of management accountability for safety in the total construction process. There were several subcontractors involved in different operations at Bridgeport but neither the owner nor any of, the contractors assumed responsibility for overseeing safety for the entire project. The construction industry differs from all other industries in a significant way. In other industries the owner and employer are synonymous. The managerial structure needed to oversee jobs in other industries is a structure that is wholly internal to the employer. The construction industry, however, is a multi-employer industry. Its managerial structure requires that each employer must have supervisors who are competent at recognizing hazards and who can stop work if a danger to employees exists. But beyond the internal management structure, the construction industry also requires a management structure that ensures that there is someone on a construction project who is accountable and responsible for overseeing safety on the project as a whole. What the statutory scheme fails to recognize is the interrelated nature of the employers' work in the construction industry. What was certainly an inadequate statute in this regard when it was enacted in 1970 has become even more so as the construction industry has become more specialized. It is possible to find as many as 300 subcontractors on a large project today. Regulations issued under the 1969 Act provide that, the prime contractor on a job must be responsible for all work done under the contract. Projects today are not operated in this manner and this regulation is not generally enforced by OSHA. Legislation must ensure that someone be accountable for the coordination of safety among all employers and employees on a project.

OSHA recently released a report it commissioned on Bridgeport and also issued willful and serious citations primarily against the lift-slab contractor and the general contractor. I congratulate OSHA on its decision and commitment, in this instance, to issue such strong penalties. I also congratulate OSHA on holding the general contractor responsible for its failure or refusal to adequately supervise the job. Citations such as these might assist in alleviating some of the concerns I mentioned above, but punitive action, while necessary, should be secondary to preventative action. The focus must be on educating employers as to the safe methods and practices and providing clear guidance to employers as to their responsibilities on a worksite. Without a recognition, in the legislation itself, of the problems inherent in the structure of the construction industry, I fear the death and injury toll will only continue to increase.

It has also been reported that a professional engineer at Bridgeport found cracks in the floor slabs but did not do anything about them. There is no well-defined system of responsibility for safety at construction worksites. Supervisory employees who are qualified to recognize the types of dangers which might lead to accidents are not guaranteed the authority necessary to prevent such accidents. They are not guaranteed the authority to order employees away from a dangerous area or to shut down work if necessary. There is also no way to ensure that an employer has personnel at the worksite who are even qualified to recognize hazards. Our laws require licensing of other professions, such as nursing, where life threatening situations might arise. States even require licensing of barbers and hairdressers. But for some reason, we require no licensing in one of the most life threatening industries in our Nation.

It is reported that the Occupational Safety and Health Administration only inspected the worksite at Bridgeport once in the early stages of construction. Again that is not meant to be a criticism of that agency; we recognize that the resources available to OSHA are so limited as to make it impossible for it to inspect all sites on a regular basis. But, it raises a subject of general importance: the inadequate system of targeting projects for inspection that presently is in place. It has been our experience that there are a number of construction employers who are concerned about safety and who recognize that preventing accidents is dictated not only by humanitarian concerns, but by economic considerations as well. On the other hand, there is another group of employers who appear to have no sense of commitment to safety and who do not appear to learn from prior injuries or deaths, or from OSHA citations for that matter. One reason for their continued lack of commitment to safety is that many employers feel that it is cheaper to pay the penalties assessed by OSHA than it is to ensure that work is done in a safe manner. As I will discuss later, this reasoning is faulty because any cost in ensuring employee safety will more than pay for itself in economic savings, but nonetheless it is apparent that the statutory penalties do not act as a deterrent. Since it is clear that certain employers continually have a bad safety track record, any inspection targeting system should first be directed at those employers or those projects who have a higher accident incident rate than is "average." I do not think OSHA would disagree with this proposition.

Unfortunately, due to inadequate recordkeeping and reporting requirements and due to the lack of a centralized records location, it is presently impossible to target those employers or projects. As stated in OSHA, recordkeeping and reporting are necessary "for developing information regarding causes and prevention of occupational accidents and illnesses." The Secretary has reserved Section 1926.22 of the regulations for "recording and reporting of injuries" in the construction industry, but no regulations have been promulgated.

Another inspection problem is that OSHA does not have enough inspectors to do the job. Therefore, due to the limited number of inspectors, the inspectors that are hired are generalists. They are expected to inspect worksites in all industries. An inspector who was trained in the food service industry, however, is not qualified to inspect a construction site. While it may be true that each industry suffers from the lack of inspectors who are specially trained in that industry, I feel the construction industry is the most adversely affected.

What I have discussed above are just a few of the major problems in the construction industry and in the present federal regulation of safety- and health in that industry. There can be no question that something must be done. Accidents such as the one at Bridgeport have previously occurred yet legislation has not been forthcoming to require employer accountability on construction sites. I recall the major accident at Willow Island, West Virginia in 1978, where a cooling tower under construction collapsed killing 51 workers. After that accident, the Building and Construction Trades Department testified before a Congressional subcommittee at the site of the accident and tried to effect some changes in the administration of OSHA, but nothing was done. We cannot afford to let this epidemic of construction industry accidents continue unabated.

It is obvious from the types of problems I have outlined above that merely tinkering with the Occupational Safety and Health Act is not an appropriate solution. We know what the problems are and they call for only one answer—comprehensive legislation setting up a new administration under the Department of Labor to deal with construction industry safety and health issues. This is not a novel idea. Congress recognized in 1977 that the special nature of the mining industry and the dangers in that industry required the enactment of a comprehensive statute and the establishment of a separate administration. What is needed in the construction industry is legislation similar to the Mine Safety and Health Act.

I would like to read the Congressional findings in the Mine Safety and Health Act and substitute the construction industry for the mining industry to demonstrate that there is at least an equal need for such legislation in the construction industry. Congress declares that (a) the first priority and concern of all in the construction industry must be the health and safety of its most precious resource—the construction employee, (b) deaths and serious injuries from unsafe and unhealthful conditions and practices at construction sites cause grief and suffering to the employees and to their families, (c) there is an urgent need to provide more effective means and measures for improving the working conditions and practices at the Nation's construction sites in order to prevent death and serious physical harm, and in order to prevent occupational diseases originating at such sites, (d) the existence of unsafe and unhealthful conditions and practices at the Nation's construction sites is a serious impediment to the future growth of the construction industry and cannot be tolerated, (e) the owners and employers at such construction sites with the assistance of the employees have the primary responsibility to prevent the existence of such conditions and practices at such sites and (f) the disruption of construction and the loss of income to owners, employers and employees as a result of construction accidents or occupationally caused diseases unduly impedes and burdens commerce.

There is no question in my mind that the construction industry should be given special treatment similar to that of the mining industry. In one year in the mining industry approximately 130 miners are killed. In the same year in the construction industry, approximately 2,500 or twenty times as many construction workers are killed. There are more fatalities in the construction industry in any given year than there are fatalities from airline accidents and yet Congress has seen fit to establish the National Transportation Safety Board. The need for separate legislation and separate administration in the construction industry is not limited to the statistics on accidents, deaths, and injuries, however, but it is also apparent from the special nature of the construction industry as compared with all other industries. As I will discuss later, many of the provisions in our proposal as well as our commitment to improve construction safety and health through the legislative process have received the support of the business community. In fact, many contractors already operate in a way that would comply with all of the following proposed provisions. We are not requesting that Congress adopt legislation that would impose an impossible burden on employers. We are asking that Congress legislatively require that all employers rise to the level of the few safety-conscious employers that operate today.

The legislation that we are urging Congress to enact should include the following provisions:

—The establishment of a Construction Industry Safety and Health Administration in the Department of Labor similar to the Mine Safety and Health Administration;

—Increased responsibility for the Advisory Committee on Construction Safety and Health. This Committee was established by the Construction Safety Act of 1969 as a tripartite committee including employer representatives, representatives of employees "primarily in the building and construction industry," and public representatives "who shall be selected on the basis of their professional and technical competence and experience in the construction health and safety field." This Advisory Committee was originally given the mandate to advise the Secretary on the development of standards and also the development of policy for the construction industry. Upon enactment of OSHA, the functions of Advisory Committees in general were limited to assisting the Secretary in standard- setting. The policy functions of the Construction Advisory Committee are still in place, at least as to those projects covered by the 1969 Act. Since the Secretary does not differentiate between federal or federally assisted projects and other projects in terms of applicable policies and standards, the Advisory Committee should be consulted with regard to policy matters. The Secretary does not use the Committee's expertise on policy issues thereby curtailing the usefulness and effectiveness of the Advisory Committee. Legislation should affirmatively establish that the Advisory Committee shall assist the Secretary on all policy matters.

—Like the Mine Safety and Health Administration, the Construction Industry Safety and Health Administration must have the authority to enter and inspect a worksite without a warrant. The Supreme Court has granted MSHA the authority to inspect a worksite without a warrant but has denied OSHA the same authority. We believe that a warrantless inspection in the construction industry would be permissible under the rationale of the Supreme Court in the mine industry case. Similarly, in the event of a catastrophic accident, the Administration should have the authority to freeze a worksite in order to organize a rescue operation or to inspect that site for the cause of the accident.

—A substantial increase in the size of penalties. Legislation should emphasize the prevention of accidents but the reality is that some employers need a strong economic deterrent. It appears the present Administration would support an increase in penalties. The U.S. Attorney General's office recently concluded that willful violations of the Occupational Safety and Health Act that result in death are now punishable by fines of up to $250,000 for individuals and $500,000 for organizations under the 1984 Comprehensive Crime Control Act and Criminal Fine Collection Act. It would be better to have the increased penalties, including, where appropriate, increased imprisonment penalties, added explicitly to the appropriate statute. Obviously where death and serious injuries occur there is an expectation that employers should be made to pay to the fullest extent possible. However, even where an employer is lucky and its violation of applicable standards does not result in an accident, severe penalties are necessary so as to deter potentially hazardous or life-threatening situations. When a driver is caught driving under the influence of alcohol, his license may be revoked and he may be subject to a severe fine even if he was not involved in an accident. Is it too much to ask that construction workers be protected from unsafe employers to the same extent that the public is protected from drunk drivers?

—Employees must have the right to refuse hazardous work without a loss of pay where the employer could have prevented the hazardous condition.

—Certain types of projects are generally more potentially dangerous than others. Those potentially dangerous projects should be subject to a permit requirement.

—All employers should be required to complete a step-by-step construction process plan and an analysis of the hazards foreseeable on the project.

—All employers should be required to adopt a comprehensive and certified safety and health program, which should include provisions for supervisory and non-supervisory employee training. Where there is an exclusive bargaining representative, the employer should be required to engage in a cooperative labor-management safety program. The Building and Construction Trades Department has had extensive experience working with employers in these types of cooperative programs. These programs have achieved extraordinary success in the reduction of worksite accidents and injuries. The legislation I am proposing only asks employers to provide the same kind of workplace that already exists where we work cooperatively with management. In order to encourage unions and employees to engage in these types of cooperative programs, the legislation must contain provisions protecting unions and individuals from liability for assisting the employer in fulfilling the employer's statutory duty to provide a safe workplace.

—Each employer must have a licensed construction safety supervisor and where there is more than one employer on a site, the owner must insure that a licensed construction safety supervisor and licensed project superintendent is hired to oversee the entire project.

—There must be more stringent recordkeeping and reporting requirements and there must be a central records location. I mentioned earlier that the statistics cited to support the enactment of the 1969 Act were conservative due to the inadequacy of reporting and recordkeeping. I find it appalling that even today, after Congress has directed the Secretary to develop effective reporting and recordkeeping requirements, it is possible to read one report stating that the annual occupational death toll is 3,750 and another report stating that the figure should be 6,900. The Secretary has not developed an adequate system and it is time for Congress to take a more directive role in this regard.

—The establishment of a Construction Industry Safety and Health Training Academy responsible for making available training for construction industry safety and health inspectors, project supervisors, project superintendents, employee safety representatives and others.

I have listed above some of the major provisions that a comprehensive statute covering safety and health in the construction industry should contain. I am also providing to the Committee a written proposal prepared by the Building and Construction Trades Department that contains the points mentioned above and other points that we believe should be included in a bill to improve safety and health in the construction industry. It must be kept in mind that any standards contained in the legislation or standards issued under its authority are minimum standards. State and local regulation of construction safety and health that is more protective of employee safety than the Federal regulation must be encouraged and must not be preempted by the federal regulation. BY virtue of some unfortunate language in Section 18 of OSHA, courts have ruled that, in the absence of an OSHA-approved state plan, more protective state and local laws and regulations are preempted. This is clearly contrary to Congress' intent.

I would lastly like to put this whole discussion into perspective. Health and safety issues do not and should not pit management against labor. Too often safety issues are perceived to be part and parcel of the larger struggle between labor unions and employers. In fact, the Building and Construction Trades Department has worked successfully, hand-in-hand with many employers in promoting safety and health. Those employers have realized that it goes beyond humanitarian benefits to provide a safe workplace to employees. During the House Subcommittee hearings where I testified on this issue and introduced the proposed legislation, a number of employer associations testified. Some of those associations actually came out in support of many of the provisions in the proposal. Admittedly, they did not actively support the establishment of a separate administration, but they did feel that many of our suggestions were valuable.

I was heartened to read a report a few years ago by the Business Roundtable where they reached the sane conclusions the Building and Construction Trades Department reached long ago. In the Business Roundtable's Report A-3, *Improving Construction Safety Performance*, the summary states "Owners have long recognized and honored a moral obligation to provide a safe work environment to minimize injuries. The primary purpose of this study report is to demonstrate that owners have, in addition to their moral commitment, an economic incentive to help reduce the number of accidents that occur on their construction projects. The high cost of accidents gives owners as construction users good reason to concern themselves with the safety efforts of the contractors they hire. Past research has shown that accidents are, to some extent, controllable by all levels of construction management. Reasonable reductions in the frequency and severity of accidents would lower the $8.9 billion cost of accidents by as much as $2.75 billion or 8 percent of direct construction labor payroll, a year. So there is ample economic incentive, in addition to humanitarian concerns, for owners to play an important role in construction safety." Providing a safe workplace makes good business sense. As stated elsewhere in the report "An effective safety program should cost significantly less than the dollar losses in accidents that otherwise are apt to incur."

I have talked with the Business Roundtable about our proposal for legislative action and I was pleased to hear that the Roundtable was equally concerned about the unsafe workplaces in the construction industry and equally committed to promoting reforms in construction safety and health. While we may not agree on the final shape of that reform, there is surprising unanimity on many of the key issues and solutions.

Safe workplaces in the construction industry are not merely unobtainable dreams. The Building and Construction Trades Department has had experience working with employers on more than 40 projects where injuries have been reduced to near zero. If all employers were as conscientious as the ones we have worked with or if they all recognized, as has the Business Roundtable, that safety can result in economic savings, there might be no need for this federal legislation. Unfortunately, not all employers are so concerned about their employees' welfare and not all are convinced that it is cheaper to protect lives than to endanger them. The federal government must do what it can to ensure that all workers are guaranteed the basic human right to a safe and healthful workplace.

Thank you for giving me this opportunity to share my thoughts with you.

Proposed Changes to S. 930—H.R. 2254

Amend the Bill as follows:

1. Wherever in the Bill, except for Section 6, "construction contractor" appears, substitute in lieu thereof "project constructor."

Amend Section 3 of the Bill as follows:

1. Strike the language in Section 3(17) in its entirety and substitute in lieu thereof the following:

> "(17) The term 'project constructor' means a person (including a construction manager, prime contractor, general contractor, or contractor) who enters into a contract with a construction owner for the performance of construction work."

2. Strike the language in Section 3(19) in its entirety and substitute in lieu thereof the following:

> "(19) The term 'construction safety specialist' means an individual who is certified by the Construction Industry Training Academy or an organization approved by the Academy as a construction safety specialist by reason of having fulfilled the requirements of a standardized training course and testing program developed or approved by the Academy with the advice of the Advisory Committee on Construction Safety and Health."

3. In Section 3 of the Act, add a definition of the term "competent person" as follows:

> "The term 'competent person' means one who is capable of identifying existing and predictable hazards in the surroundings or working conditions which are unsanitary, hazardous, or dangerous to employees, and who has authorization from the employer to take prompt corrective measures to eliminate them."

4. In Section 3 of the Act, add a definition of the term "qualified person" as follows:

> "The term 'qualified person' means one who, by possession of a recognized degree, certificate, or professional standing, and who by extensive knowledge, training, and experience, has successfully demonstrated the ability of the individual to solve or resolve problems relating to worker safety and health involving construction work."

5. In Section 3 of the Act, add a definition of the term "incident" as follows:

> "The term 'incident' means an incident occurring at a construction worksite which involves (i) a structural failure that leads to the collapse or potential collapse of a structure or excavation in any degree of completion, (ii) a fire or explosion, or (iii) an other class of incident as determined in regulations promulgated by the Secretary which could have caused death or serious injury or illness had an individual been in proximity.

6. In Section 3 of the Act, add a definition of the term "project construction safety specialist" as follows:

> "The term 'project construction safety specialist' means a construction safety specialist who is designated by the project constructor to perform the duties prescribed by this Act at a construction worksite."

Amend Section 5 of the Bill as follows:

1. In subparagraph 8(h)(3)(A), strike "the Contract Work Hours and Safety Standards Act (40 U.S.C. 327 et. al.)" and substitute in lieu thereof "the Act of August 9, 1969 (40 U.S.C. 333)."

2. Amend subparagraph (h)(4) to read as follows:

> "(4) The Secretary shall inspect on a priority basis construction projects of construction owners and construction worksites of employers having a higher than average frequency or severity rate of injuries, illnesses, or incidents for the specific type of construction operation involved.

3. Amend subparagraph 8(i)(1) to read as follows:

> "(i)(1) Each construction contractor shall maintain accurate records concerning fatalities, injuries, and incidents at a construction worksite."

4. In subparagraph 8(j)(3)(I) strike "Construction Safety Specialist" and substitute in lieu thereof "employer."

5. In subparagraph (j)(4)(A), strike "all" and ", as well as reports of those categories of serious injuries."

6. Amend subparagraph (k)(1) by adding the following at the end thereof:

> "(H) a statement that the Secretary of Labor or any authorized representative shall have a right of entry to the project for the following purposes:
>
> "(i) to inspect or investigate the matter of compliance with this Act, or any standard, regulation, rule or order, promulgated pursuant to this Act;
>
> "(ii) to carry out the duties of the Secretary under this Act.

Amend Section 6 of the Bill as follows:

1. In subsection (a) of Section 35, strike "a construction contractor" and in lieu thereof insert "every construction employer (hereinafter in this section referred to as the 'employer')."

2. Strike "construction contractor" wherever else it appears in Section 35 and substitute in lieu thereof "the employer."

3. Amend subparagraph (b)(1) of Section 35 to read as follows:

> "(1) IN GENERAL.—The program shall provide for the assignment of a construction safety specialist or a competent person who is responsible for general management of the program and will be present on the worksite at all times that the employer is engaged in construction work."

4. Amend subparagraph (b)(2) of Section 35 by adding the following language at the end thereof:

> "(2) Such duties shall include the making of frequent and regular inspections of the employer's worksites, materials and equipment, and, as regards employees of the employer, the taking of all actions necessary to eliminate hazards including the stoppage of work at, or the removal of affected employees from, an area in which imminent danger exists that cannot be eliminated immediately through actions not requiring the stoppage of such work or the removal of affected employees."

5. Add a new paragraph at the end of subparagraph (h), as follows:

> "The requirements in this subsection shall be in addition to the Secretary's regulations regarding material safety data sheets."

6. In subparagraph (k)(1) add "those" following "informing."

7. In subparagraph (l)(2), strike the language in its entirety and substitute in lieu thereof the following:

> "(2) QUALIFIED PERSON.—Hazardous condition evaluations and substance analyses shall be conducted for the employer under paragraph (1) by an individual who meets the requirement of a qualified person."

8. In subparagraph (l)(3) add "project" before "construction safety specialist", strike "and" following "construction safety specialist", and add "referred to in Sections 36 and 37 of this Act, and to" following "construction safety specialist."

Amend Section 7 of the Bill as follows:

1. Add "project" before "construction safety specialist" wherever it appears in this Section.

2. Add the following language at the end of subsection (a) of Section 36:

> "Whenever feasible, the on-site project safety and health plans shall be set forth in the contract documents for the project. where the plan is not set forth in the contract documents, the construction owner shall ensure that the plan meets the requirements of, and shall be implemented in accordance with, this section."

Amend Section 8 of the Bill as follows:

1. Add "project" before "construction safety specialist" wherever it appears in this Section.

2. Delete subsection (e) in its entirety and redesignate subsection (f) as subsection (e).

Amend Section 11 of the Bill by striking the language therein in its entirety and substituting in lieu thereof the following:

SEC. 11. PENALTIES.

Subsections (a), (b), and (c) of Section 17 (29 U.S.C. 666) are amended by striking "of Section 5" in each subsection.

Add to the Bill a new Section 9, set forth below and renumber Sections 9 through the last section accordingly.

SEC. 9. PERMIT SYSTEM FOR CERTAIN CONSTRUCTION SITE OPERATIONS.—The Act is further amended by adding at the end thereof the following new section:

"SEC. 38. PERMIT SYSTEM FOR CERTAIN CONSTRUCTION SITE OPERATIONS.—

> "(a) Requirement of Permit.—The issuance of a permit by the project construction safety specialist shall be required prior to the commencement of any operation determined to pose a risk of death, serious injury, or serious illness as determined by the Secretary in regulations issued hereunder, or by the construction safety specialist on the site. These operations (hereinafter referred to in this section as "covered operations") shall include but not be limited to
>
> "(1) the construction of trenches and excavations;
> "(2) the erection or dismantling of scaffolding;
> "(3) the demolition of any building or structure;
> "(4) operations requiring employees to enter confined or enclosed spaces; and

"(5) operations involving exposure to asbestos and other toxic materials.

"(b) Application.—

"(1) In General.—An employer in the construction industry shall apply for and obtain a permit to engage in a covered operation by submitting an engage in a covered operation by submitting an application demonstrating that, as regards such operation, he is knowledgeable of, and intends to comply with, the requirements of this Act and all standards, regulations and orders issued pursuant thereto, and that he maintains a safety and health program, consistent with this Act, which adequately addresses the hazards presented by the covered operation and will enable him to perform such operation in a safe manner, including the conduct of necessary tests and inspections, the safe use of equipment, and the exercise of safe work procedure. Permits shall be in effect for one year, unless revoked by the construction safety specialist, and shall be renewed annually.

"(2) Number of Permits.—Only one permit shall be required for two or more of the same covered operations to be performed by the same employer on the same site, except for those instances as may be determined by the construction safety specialist.

"(3) Notice and Certifications.—Immediately prior to the commencement of work on each covered operation, the employer shall notify the construction safety specialist on the project of the expected date of commencement of work on that covered operation. Where the operation previously has been performed by the same employer on the same site, and only one permit is required pursuant to paragraph (2), the employer may forego applying for a second permit by certifying in writing that the demonstration made under paragraph (1) to obtain a permit continues to apply to such work.

"(c) Issuance of Permits.—In issuing permits, the construction safety specialist shall affix his name, and registration or certification number on the permit.

"(d) Posting of Permit.—Every employer issued a permit shall post a copy or copies thereof at or near the covered operation. If such posting is impracticable, the permit shall be posted at the nearest practicable location and the affected employees shall be notified of such location.

"(e) No less frequently than annually, the Secretary shall review the list of operations for which a permit is required to determine whether a permit shall be required for additional operations.

PREPARED STATEMENT OF WILLIAM A. DUVAL, GENERAL PRESIDENT, INTERNATIONAL BROTHERHOOD OF PAINTERS AND ALLIED TRADES

Mr. Chairman, members of the Subcommittee, my name is William A. Duval, general president of the International Brotherhood of Painters and Allied Trades, a union representing approximately 162,000 members engaged in the manufacture and application of protective and decorative coatings and finishes.

Thank you very much for inviting IBPAT to testify before this subcommittee to offer our experience with OSHA and to make our recommendations to improve its ability to meet its obligation to assure safe and healthful workplaces for working men and women in the construction industry. You have asked in particular that we respond to several issues: (1) has OSHA been as aggressive as possible in construction, (2) are the patterns of enforcement in construction worthwhile, (3) are OSHA inspectors properly equipped in terms of skills and knowledge to recognize construction hazards and (4) does the current Act provide sufficient coverage for construction workers. Let us take these issues in turn.

FIRST, IS OSHA AS AGGRESSIVE AS POSSIBLE? All things considered, the answer is no. While understaffed and underfunded, OSHA often expends resources on positions contrary to the best interest of construction employees. The Hazard Communication Standard is a good example of these failings.

OSBA used precious resources to exclude construction workers from the standard's scope, ignoring in particular testimony by IBPAT and other unions on its importance. Then, after a long and costly court battle, OSHA adopted the same standard for Construction as for General Industry, this time ignoring the advice of various construction trade unions, employer groups and OSHA's own Construction Advisory Committee who recommended a separate construction standard.

There is no doubt that OSHA would have better served construction by aggressively using its resources to tailor the hazard communication standard to construction's unique multi-employer structure in the first place than by proposing and defending a position that meant less protection for construction workers. Instead, OSHA is now faced with additional legal challenges for failing to do what its own advisory committee knew was best. OSHA's contrary attitude and foot-dragging on setting this standard for construction is not unique. Other instances include: the concrete standard, the trenching standard, perimeter roof guarding and tunneling. On the tunneling standard, construction has waited 17 years, and it's still not done.

In the area of health standards, OSHA has also failed to be aggressive and its performance is often justly criticized in General Industry and Construction. Since its inception in 1970 only 15 or so new or revised general industry health standards have been promulgated and two of those have been overturned by the courts. But the record in construction is absolutely dismal.

In 17 years, only one construction health standard has ever been promulgated specifically for construction—the Asbestos Standard. And just two new General Industry Standards have been extended to Construction without extensive reductions made in the protections afforded construction workers—the Medical Access and Hazard Communication standards. And no standards have been promulgated which offer more protection to construction workers than to workers in general industry, though the reverse is frequently true.

As a result of OSHA's inaction on construction health standards, construction workers are daily exposed to thousands of chemical and physical hazards that should be regulated but are not. And absent standards, workers do not have the basis to demand protection, except as offered by the General Duty clause. Meanwhile, the discovery of new hazards and the devising of ever more esoteric exposures increase geometrically each year while OSHA's control of them grows arithmetically, advancing one increment every 20 years.

The failure to promulgate an abrasive blasting standard is one instance which exemplifies OSHA's lack of aggression in setting construction health standards that offer the best feasible protection.

ABRASIVE BLASTING STANDARD (SILICA DUST). No change has occurred in the OSHA standard for abrasive blasting with silica sand since its promulgation in 1971. At that time it was supposed to be just a temporary standard. And since as early as 1974 NIOSH has conveyed to OSHA that the standard's TLV is too high and recommended it be set at one-half the current level.

It was in 1978 that OSHA conducted a technological feasibility assessment and economic impact analysis, but no standard emerged. So even with all the preliminary work done on this standard, OSHA just hasn't the aggressiveness to finish it.

Now OSHA says it has made a special effort to enforce the existing regulation, inadequate as it is, yet we have seen very little evidence of this either. In the year 10/86 through 10/87, for example, only two of 111 OSHA citations received by the International issued to IBPAT signatory contractors were for violations of the current abrasive blasting standard 1910.94 and the total fines proposed were zero. This hardly represents an aggressive effort to control unsafe blasting conditions in construction.

Silicosis, like asbestosis, is a purely industrial disease. Silica exposure is the only way to get it. And an aggressive regulation with aggressive enforcement is the only way to prevent it. Neither has been provided by OSHA.

OSHA has also failed to take an aggressive stance in transferring safe guards of General Industry Standards to Construction Standards, thus allowing less protection for construction workers than for general industry workers. Two examples are the Hearing Conservation Standard, 1910.95, and the Lead Standard, 1910.1025. In both cases, worker monitoring and examination safe guards necessary to detect early exposure and verify compliance were excluded in the construction standards. An aggressive OSHA effort would have retained or adopted these safeguards for construction.

HEARING CONSERVATION: Noise is a big industrial problem and a standard, 1910.95, was promulgated which included an amended subpart C, requiring testing and evaluation to detect and prevent hearing loss. Yet, in construction, where noise is an equal or greater problem, OSHA chose that the amendment would not apply. Therefore, the testing and evaluation essential to verification of program effectiveness are absent. And the reality is, no testing and measurement programs means no compliance. Why should construction workers receive less protection than industrial workers in these circumstances?

LEAD STANDARD. Another example is the lead standard. It is a shame that there is no construction standard for lead exposures, even though data about workplace air lead levels and blood lead levels show that both have decreased in the Industrial settings since the issuance of OSHA's revised General Industry Lead standard in 1978. OTA says the improvements can be explained by "changes in exposure to lead in workplace air, the use of medical removal protection, decreases in the amount of lead absorbed from the environment, changes in lead measuring methods, and improvements in respirator programs and hygienic practices."

In spite of the successes of the standard in General Industry, its scope has not been expanded to include workers in construction, especially painters who must remove old lead paint from steel structures or from homes.

Every year new cases of lead poisoning are reported among our members. And in all these cases, requirements for blood lead tests for construction workers involved in lead removal could have detected these health problems early on and mandated correction of work practices. Why shouldn't construction workers exposed to lead be guaranteed the same protections as industrial workers?

The typical OSHA response is "technologic infeasibility." But that doesn't really hold water. For example, construction employers today routinely monitor workers for alcohol and drug abuse. Frequently, blood tests are used. This is not the result of any recent revolution in technology, feasibility or methods since the lead standard was issued. Nothing new has been added to the picture, except the employers' desire, that makes this testing or its associated recordkeeping more possible today than yesterday. It's the same world that could have made blood lead evaluations possible in construction when the standard was promulgated. The plain truth is that OSHA has failed to aggressively anticipate, evaluate and incorporate reasonable technological change into construction standards.

With new HUD programs aimed at removal of lead paints from houses, the potential for exposure for our members will increase dramatically over the next few years. Consequently, it is important that OSHA develop a construction-oriented lead standard which would require, at a minimum, blood lead testing for all workers involved in the removal of lead. It is not impossible to see how a construction industry lead standard requiring regulated areas and use of control technologies similar to those used in the asbestos industry could be relevant.

The OSR Act clearly intended that standards should be technology-forcing. Yet OSHA has regularly failed to aggressively propose non-traditional innovations which are consistent with the obligations of the OSH Act to assure so far as feasible safe and healthful workplaces. The lead and hearing conservation standards exemplify this failure. But so do other concerns.

OSHA has failed, for example, to fully consider public comment during the standard setting process by ignoring responses to Advanced Notice of Proposed Rules (ANPR's) or Notice of Proposed Rules (NPR's) which do not fit or agree with the preconceived ends it seeks. One example occurred to IBPAT during the Hazard Communication Standard rule making. IBPAT provided extensive comment on the hazards in the paint trades, SIC 15, 16, 17, offering 10 pages of documentation of the risks of paint trade construction workers, including epidemiologic studies, and provided argument related to each risk. But when the rule-making appeared, OSHA stated that it had received no comments from anyone concerning expansion of the hazard communication standard to other SIC groups. Our comments were raised in the Steel Workers' brief, on which IBPAT appeared amicus, which ultimately led to the expansion of the standard's scope. But OSHA ignored our comments completely.

A similar circumstance faces IBPAT again, with OSHA's proposed modifications to the respirator standard, 1910.134. Over the years, IBPAT has proposed to OSHA in several hearings and for several dockets that respirator selection be done top-down, based on feasibility, to assure workers the highest degree of protection, rather than bottom-up as is current practice, which encourages placing workers in the least protective respirators.

For example, frequently it is technologically and economically feasible to outfit a worker in a supplied air hood with a protection factor of 2,000, but it will not done because OSHA regulations only require a negative-pressure mask with a protection factor of 10. As a result, the worker receives only 1/200th the available, feasible protection.

We have argued, without a murmur of response from OSHA, that top-down respirator selection is consistent with obligations of 6(b)(5) of the OSH Act, providing the best feasible protection for workers, and consistent with good industrial hygiene practices which typically support selection of the most protective, feasible, controls first.

We have also pointed out how current bottom-up selection creates an economic incentive for employers to substitute less effective respiratory protection instead of more protective engineering controls. After all, if the contractor is faced with using a $2,000 ventilator or a $20.00 cartridge respirator, there is no way the contractor will find the ventilator feasible. If, on the other hand, the selection was between a $2,000 ventilator and a $2,000 supplied-air respirator system, then the choice would be made on the basis of protection.

Yet, OSHA has treated our comments on respirator selection with the same disregard given to our comments on the Hazard Communication Standard. Yes, OSHA may choose what it considers relevant and propose what it considers best. But, OSHA has an obligation to consider all the facts in reaching its decision and an obligation to propose and adopt standards which are technology-forcing if they offer better protection to workers. The fact is, that the current respirator hierarchy doesn't offer the 'best' feasible protection available for workers. And this is a fact OSHA continues to ignore when it should be aggressively pursuing a better solution to improving protection for workers required to wear respirators, rather than just rehashing the same old traditional approaches, developed before OSHA's time, which have already short-changed workers for 30 years or more.

In other hearings, similar to this one, it has also been recommended to OSHA to pursue generic standards, regulating by class of chemicals or by processes, instead of substance by substance. There is little doubt that OSHA's potential protection of worker health is thwarted by the glacial pace at which single substance standards can be promulgated. It should also be pointed out that the whole notion of substance by substance regulation is biased to producers or users of raw materials—and they employ only a minority of the workers OSHA is charged to protect. In the construction arena, where a well-implemented control process is the key to preventing multi-substance exposures, generic standards make a lot of common sense. For example, the control measures of the construction Asbestos Standard would apply, generically, to many other dust or particulate substances. But, again, OSHA has not aggressively pursued this avenue, though for construction work it offers one of the best solutions.

SECOND, you have asked us to consider if OSHA's PATTERNS OF ENFORCEMENT IN CONSTRUCTION ARE WORTHWHILE. Again, the answer is no. In addition to a failure to provide good standards for construction, OSHA has often failed in enforcement of key standards for construction. For example, respiratory protection requirements and workplace exposure monitoring.

Because of the temporary nature of construction job sites, respiratory protection frequently becomes necessary to control exposure. However, according to 1910(a)(1), before resorting to respirators, all other feasible means of control, such as product substitution, engineering controls and administrative procedures are supposed to be employed. Never, never have we ever seen an employer in construction cited for failure to provide these controls before resorting to respirators. As a consequence, OSHA, by failure to enforce, is allowing employers in practice to do what has been turned back time-and-time again in the standard setting process—that is, to select respirators for exposure control in preference to other more effective means, ventilation, for example. This single factor accounts for thousands of workers receiving less than the full protection that is their due under 6(b)(5)—that is, the assurance of safe and healthful working conditions, insofar as feasible. We do not regard this as a worthwhile pattern of enforcement.

Further, for the period 10/86 through 10/87, OSHA sent IBPAT copies of 111 citations issued to signatory contractors. Excluding willful or repeat violations, only nine were violations of the respirator standard 1910.134. And the average penalty was just $101.00 per citation. Assuming a 50 percent efficiency of OSHA "citations to visits," or about 200 plus visits to IBPAT signatory contractors per year, with 6,000 IBPAT signatory contractors, this is less than a one in six hundred chance of visit and a one in 300 chance of a respirator citation. Yet studies conducted by IBPAT show 50 percent of our members report never being provided any respiratory protection for work with solvent-borne coatings and 80 percent report neurotoxic effects of over-exposure to solvents as a regular part of their work. It is our opinion then, that OSHA's citation record for respirator violations in the painting construction industry represents a failure to aggressively target and enforce.

Viewed in another fashion, it could be said that if a contractor put 33 cents per year aside, by the time cited for a respirator violation, the contractor could pay the fine. This is hardly a worthwhile, aggressive or successful pattern of enforcement.

By comparison, the 109 other violations among signatory contractors, not counting repeat or willfuls, averaged $248 and occurred with 10 times the frequency of respirator violations. That places a compliance cost for all other violations on the contractor of about $7.00 per year. Again, this is nothing to rave about, for example it can be compared with the Office of Technology Assessment (OTA) estimate for manufacturing that concluded a manufacturer needed to put about $30.00 per year in the bank to have enough on hand to pay for violations. And while the comparison as drawn may not be perfect, it hardly points to an aggressive or successful pattern of enforcement in either construction or manufacturing, but clearly, construction is worse.

Afterall, what kind of compliance can be drawn from a contractor who realizes that placing $30 or even $100 a year in the bank will be sufficient to offset any likely OSHA fine. What kind of protection can be purchased for that? Very little. And in that regard that is what OSHA's current pattern of enforcement is worth, very little.

OSHA's pattern of enforcement also fails in construction to apply standards in a technology-forcing fashion—as we believe OSHA is directed to do by the intent of the Act. An aggressive pattern of enforcement would require OSHA to periodically review the changing pattern of feasibility of controls—the state of the art—and modify enforcement strategy accordingly. A good example where re-evaluation is necessary has already been couched on briefly in our discussion of the lead standard. It is in the area of workplace exposure and bioassay monitoring.

Many existing OSHA standards applicable to construction could be construed to require employers to make workplace exposure or bioassay measures to assure compliance with applicable TLV's or action levels, especially in regards to verifying proper respirator selection. In the past, OSHA has been content not to cite employers for failure to provide such tests, by and large it seems, because it was considered technologically infeasible. We now know from the massive proliferation of drug and alcohol testing, discussed earlier, that it is economically and technologically feasible for construction employers to carry out monitoring and bioassay programs aimed at reducing accidents—especially when they can lay off the responsibility to the worker.

But OSHA has not acted. OSHA has not recognized that employers with drug and alcohol programs have made a de facto demonstration of feasibility for workplace substance testing. It is our opinion that a worthwhile pattern of enforcement would include enforcing bioassay and workplace monitoring for workplace substances in accordance with requirements of existing standards and that OSHA should also promulgate new standards that require such monitoring for workplace exposures in future standards.

Certainly, any employer currently using drug and alcohol testing also has the ability to use other tests for detecting other substances that relate to workplace exposures that may be even more likely to cause workplace injury or illness.

The third area on which you requested comment is HOW EQUIPPED OSHA INSPECTORS ARE, IN TERMS OF SKILLS AND KNOWLEDGE, TO RECOGNIZE CONSTRUCTION HAZARDS. Without a doubt, there is a need for OSHA staff with better knowledge of the construction industries, and its not limited to inspectors. Consider, for example, the way in which information provided by IBPAT to OSHA was used in the benzene standard.

IBPAT provided exposure modeled estimates to OSHA for benzene exposure. The exposure estimates were based on 8 hours per day of product application at various rates of use. OSHA contended in its notice of the standard in the federal register that our model was flawed because it would only take a few minutes to spray the room, after which the worker would leave it; so the worker would never be exposed to benzene for 8 hours. Well, where did OSHA expect the worker to go after finishing the room? Home? In fact, he or she would go on to the next room, and the next, starting the exposure cycle over and over again. And, at the end of 8 hours, that worker would have 8 hours of exposure—not at all unlike painting in the same room for 8 hours, since the bulk of the exposure is from the spray plume itself, not from evaporation of solvents from the walls. This lack of understanding of construction processes leads many in OSHA, who do not have construction experience, to underestimate the exposures and risk in construction, comparing them to industrial examples, from the background most have come.

As for OSHA inspectors in construction, most have good solid safety backgrounds, not health backgrounds. Inspectors cite what they see and see what they know. And in the paint trades, for example, it appears they know 10 times as much about safety as health, based on citations issued. For the paint trades, inspectors more knowledgeable about respirator selection, about paint systems and components, about epoxies and urethanes, these are needed. Every trade could establish its list. But much of what is needed is TRAINING AND TESTING of officers to insure they have the knowledge. Perhaps a certification of officers for certain fields or processes would be appropriate. I know OSHA's training institute is moving in this direction and doing what it can with what it has. But developing better training requires a deeper commitment of resources, which doesn't seem to be available. Further, overall it is difficult to criticize the inspectors when conditions within OSHA are such that even the perfect inspector would be reasonably ineffective. A racing engine on a wheelbarrow is a waste of power.

To begin with, all the skill and knowledge in the world wouldn't be able to offset the understaffing and underfunding of inspection staff that has persisted in OSHA. I have heard it said that there are more game wardens than OSHA inspectors and have no reason to doubt the truth of it, that the animals of the country have more protectors than the workers. with additional staffing and funding, the shortages of skills could be met.

Finally, You have asked us to give our opinion on whether THE ACT PROVIDE SUFFICIENT COVERAGE FOR CONSTRUCTION WORKERS. In our presentation this morning, we have elaborated on a number of short-comings in standard setting, enforcement, funding and so on. There are also some solutions that would be valuable, recognizing that funding shortages are likely to continue as they always have.

For example, in the absence of OSHA being granted the resources to conduct workplace substance monitoring, these requirements of testing rightfully belong upon employers doing the work as a necessary part of their obligation to assure a safe and healthful workplace. Then, the OSHA inspectors job would be one of evaluating the data, its efficacy and the protections provided to meet the conditions. Therefore, more monitoring requirements for employers who engage in work which exceeds the TLV's of hazardous chemicals or for employers who rely on respirators for worker protection make sense.

Second, certification of workers or their supervisors or their foremen for certain classes of hazardous work, for example asbestos, or lead, or urethane or spray painting or work at elevations, needs to be implemented. The basis for such certification requirements is found throughout the construction standards, in at least 35 sections. Certification of workers, supervisors and their foremen is the key to assuring a work-force trained in the hazards of the trades and methods of hazard avoidance or containment, much as training and certification is a key to good OSHA inspectors. Such a workforce helps offset the inability of OSHA inspectors to be ever-present and increases the likelihood that OSHA will be called upon when needed, a pre-eminent means of targeting something OSHA can never be too good at doing.

The rationale underlying certification of workers, supervisors or foremen is very simple. It is an employers obligation to provide a safe and healthful work environment. To the extent that this environment can only be assured through the actions of workers, then employers must be responsible for assuring that the workers are qualified by their ability and knowledge to act in a fashion that minimizes the risk. A process of certification of the workforce engaged in risky work is the best means for the employer to accomplish this.

Certification can work. Our District Council 9 of New York City has such a program for the certification of foremen. Joint labor-management sponsored, it requires anyone working on any job as a foreman to be safety certified. Representatives of DC 9 are here today to offer details of that program and I believe a management representative of the painting industry will appear later this week.

But, while all the standard setting and enforcement concepts we have discussed so far may be possible under the current Act, there are some issues in construction which the Act cannot address. For example, the OSH Act does not cover an estimated 900,000 self-employed workers. Now in General Industry, not covering the self-employed may not be such a problem. After all, it takes a few million dollars to open up a paint plant. But it only costs about $200.00 to capitalize yourself as a painting contractor, and that's if you decide to wear clean whites instead of jeans. And so it is a problem.

In the painting trades 95 percent of our contractors employs five or fewer workers and at any time at least one in 10 or one in 20 painters is self-employed, which is almost synonymous with out of work. As a result, each day of the year 45,000 to 90,000 painters (union and non-union) are engaged in potentially hazardous coatings application work and are not covered by OSHA.

Of greater concern is the way this group of self-employed painters undermine coverage for other painters. These self-employed painters, not covered by OSHA, bid for work against the other contractors who must comply with OSHA regulations, and as a result gain a competitive edge that forces other painting contractors, covered by OSHA, to either loose the bid or skimp on protections to win it.

The problem gets worse. What is more frequently occurring these days is that small and medium size contractors—those with five or fewer employers—have wised up and "subcontract" to these "self-employed" contractors (I use the terms loosely) to avoid legitimate costs of doing business, such as complying with OSHA regulations. I'm not certain, but I believe this is a problem for other construction sectors as well, and it cannot be addressed by the current Act.

In conclusion, some of our concerns about OSHA in standards setting and enforcement in construction are not structural. But this is belied by the fact, for example, that health regulations grow at a rate 15 times faster in manufacturing than in construction and that enforcement penalties may be less than half the rate for construction as in manufacturing.

In addition, The current record of occupational safety and health in construction is not good. And the growing numbers of accidents, injuries and deaths is just the visible outline of a festering cauldron of occupational mayhem and disease which remains largely invisible to us all due to insufficient reporting and measurement requirements, under reporting on or ignoring of existing recordkeeping and monitoring requirements and disease latency.

Make no mistake about it. Construction is not an easy environment to regulate. The jobs are all temporary. The workforce is transient. And the work at any jobsite changes from day to day and hour to hour. Worksite control is frequently fragmented, with several employers occupying the same workspace at the same time. This is a far cry from the fixed worksites of manufacturing where the same jobs are done at the same location by substantially the same workers day in and day out for year after year. And everyone is working for a single employer.

It is possible then that these differences require two separate legislative mandates rather than a single one, especially if OSHA is unable to improve its record.

In addition, it wouldn't hurt to help OSHA with its job by offering tax credits to construction employers who invest in safety-related equipment and writing government work bid specifications that require, specifically and explicitly, the kinds of safety and health equipment that must be provided by the contractor to be a successful bidder.

Thank you very much for the opportunity to provide these comments. We are open to any questions you may have.

PREPARED STATEMENT OF EDWARD J. CARLOUGH, GENERAL PRESIDENT, SHEET METAL WORKERS' INTERNATIONAL ASSOCIATION

Good morning, Mr. Chairman. My name is Ed Carlough and I am general president of the Sheet Metal Workers' International Association, a union of approximately 150,000 members in the United States and Canada. About 100,000 are skilled craftsmen in construction—primarily installing and maintaining HVAC systems—in both new construction and rehab and retrofit construction work. Another 40,000 of our members are employed in the manufacturing of heating and air conditioning systems and equipment and other appliances. A smaller number are employed in other general industries such as railroads and shipbuilding.

We thank you very much for the opportunity to appear before this committee and present our concerns about OSHA's performance in the construction industry. I am here to share our recent experiences with OSHA's monitoring and enforcement of the asbestos standard, and OSHA's general inability to address health and safety hazards in the construction industry.

I first would like to inform you of some activities within our industry which have made us more sensitive to OSHA's performance than ever before.

We are well aware that construction workers are exposed to health hazards beyond the traditional scope of construction safety matters. Asbestos is THE major regulated health hazard that we are presently faced with. A nationwide medical screening program of sheet metal construction workers with 20-25 or more years in the industry shows that approximately half of them have abnormal x-rays. These abnormalities are most likely associated with previous exposure to asbestos. These individuals were the entrants into the construction industry up through the mid-60's. A younger generation of sheet metal workers has entered the industry and is now working on repair or renovation in the same buildings built by the older workers who are being screened. The majority of them are working with or around asbestos and asbestos-containing materials, removing or installing HVAC systems.

The cases of cancers and asbestos-related diseases we are discovering through our medical program is placing a tremendous financial burden on our health funds, workers compensation and Medicare insurance program. I obviously cannot begin to address the tragedy, sadness, and disabling illness that asbestos has brought to sheet metal workers, their families, and their survivors.

We are joined by union contractors in the sheet metal industry in our determination to avoid repetition of this terrible situation in the future by training journeymen and apprentices in proper work practices and handling of asbestos products encountered in their work. We have developed an asbestos abatement training program excelled by none. Our local leadership should now have a high level of awareness of the problem and our union publications supply information on a regular basis about asbestos and the consequences of unprotected exposure. Because of this educational effort, which has been growing over the past three years, we are encountering a lot more inquiries from our members in the field than ever before. And as a result, our contact with OSHA area offices and compliance officers has been growing proportionally.

It is our keen disappointment with OSHA that brings me here today.

Asbestos has been regulated in one form or another by OSHA for a long time. Yet despite the agency's familiarity with the mineral, we see an alarming deficiency in the expertise, availability of and enforcement by OSHA inspectors. Guidelines for monitoring and enforcing asbestos abatement and removal are fairly straight-forward. And, as one might expect—because of our thorough 32-hour training program, asbestos removal work is not an area in which we are encountering problems. Instead, we are learning—instance by instance—that sheet metal workers and others working for general and subcontractors on multi-employer sites are being exposed to high levels of asbestos over relatively short periods of time. The problem is compounded because the same construction people move to other jobs with repeated exposures.

In the past few months Sheet Metal Workers in El Paso, TX and Evansville, IN have had terrible experiences with OSHA. The failure of OSHA or its designated state agency to meet their regulatory responsibilities has left about two dozen sheet metal workers with great anxiety about their future health. I couldn't tell you how many others from additional crafts are also affected in these two areas. Our sheet metal members are very worried about the high levels of asbestos they were exposed to during remodeling and renovation work.

In El Paso the exposures occurred because of an OSHA industrial hygienist's lack of expertise in respiratory protection. An industrial hygienist in OSHA's Lubbuck office, which covers El Paso, told our agent by phone that the sheet metal workers should wear "disposable paper respirators with two supports" (which means two elastic bands around the head) until the inspector got there—which was supposed to have been the next day. That next day was more like 2½ weeks later. By OSHA's own standards, paper masks are not suitable for asbestos exposure.

In the El Paso case, which we are documenting thoroughly, the OSHA compliance officer refused to conduct air sampling on a Friday because it would run into overtime which he didn't think he could get authorized. El Paso is 600 miles away from the area office. Yet the inspector couldn't take extra time to do air sampling of a serious situation at one of two renovation sites. We do not want to make unreasonable demands or unnecessarily cut into someone's weekend. However, OSHA inspectors have a sworn duty which we think should be respected and upheld. The El Paso problem began in July and to my knowledge is now scheduled for informal review by OSHA's regional administrator in Dallas. We will wait until after that review to consider what further steps to take.

OSHA's approved Indiana program reacted with indolence to requests for guidance and assistance after heavy exposures were incurred in Evansville. I understand it took weeks for an Indiana state inspector to do an investigation, take oral histories of the individuals and advise them of their options. And this took place only after the Federal OSHA monitor did some nudging in Indianapolis.

The Texas and Indiana stories are extreme but yet they have happened. I've asked our union representatives around the country (see exhibit A, "*The Scene Today*", p.6) to start putting in writing their experiences with OSHA and enforcement of the asbestos standard so we'll have more documentation of what's been happening under this administration, and any others in the future for that matter.

What I fear is happening more often is that repair and replacement of long segments of ducts and pipes are being treated as small-scale, short duration work which is difficult to determine or define in the sheet metal industry. As you know, OSHA has yet to provide a good working definition of small-scale, short duration work. Yet these jobs are exempt from full regulation. This, in effect, gives contractors discretion to decide if a job is small-scale, short duration. what of the workers who ordinarily work on small scale and short duration jobs? This is a highly mobile segment of the industry and these workers can work on 3 or 4 such jobs per month. Has this type of almost constant exposure been considered? What protection can these people expect? We are fairly certain what the rip and zip contractors will decide.

At a hospital job in Paterson, New Jersey which started last month, a relatively small sheet metal job is underway, replacing segment after segment of asbestos-insulated duct. There are only a few people doing this job but our representative called OSHA anyway out of concern for our members and a lot of other people potentially affected in the hospital—patients and employees alike. To its credit, an OSHA representative came the next day and instructed the hospital to do air monitoring. We are now trying to find out where, when, and how the monitoring was done because the sample came back .003 f/cc. It has been more than a month since OSHA took a bulk sample and still no analysis of the material is available. The sample hasn't come back from the lab. The .003 f/cc count is so well below the asbestos standard's action level that no glove bag or other precautions are required and the sheet metal work goes on.

We hear many types of stories like this and I'm asking our agents to document them. It is common in our industry that sheet metal work may be done in a few days, a few weeks or a few months, depending on the job. On the smaller jobs where asbestos is as much a threat as anywhere else, it takes almost that long to get OSHA to respond to the formal written complaint.

Obviously, some of this poor performance by OSHA is a reflection of political philosophy at the top. We are highly critical, however, of a number of other factors.

1. Lack of inspectors. In 1982 OSHA had authority to hire up to 1,800 enforcement personnel. At the Administration's request, the number was dropped to 1,200 inspectors and there are now only about 1,000 inspectors to cover both construction and general industry.

2. Too many non-inspection activities. The 1,000 federal inspectors are also expected to:

a. hold informal meetings to settle cases.
b. act as consultants to businesses;
c. serve as public relations agents by giving speeches and arranging seminars;
d. act as information officers to handle public inquiries;
e. oversee data processing operations;
f. monitor state plans;
g. handle Freedom of Information requests;
h. set up office safety and health programs.

In addition to this list, I understand OSHA is considering yet another voluntary management program termed "CHAMPS" (Cooperative Health Audit and Monitoring Programs) which would have to be monitored by OSHA inspectors. Whether this takes effect or not, the OSHA inspectors are saddled with a lot of work which should be handled by administrative personnel. Small wonder the number of OSHA inspections is down.

3. Inexperienced and incomplete construction inspections. We reviewed copies of OSHA citations we've been accumulating the past year and find that of the 216 citations in our files, 120 or 56 percent were primarily electrical, ground fault and guardrail citations with minimal or no fines at all. One hundred of the 216 citations, or 46 percent, contained absolutely no fines. Of all the 216 total citations reviewed, none identified an asbestos problem.

The code of regulations for construction standards is nearly as thick as the regulations for general industry. OSHA has maintained a policy of hiring inspectors without regard to industry specialties. We believe that policy is wrong. It's obvious that there are worlds of differences between a manufacturing plant and a construction site. The construction industry experiences among the highest injury and fatality rates in the country. There are a few unskilled personnel and a lot of highly-skilled crafts working simultaneously with specialty contractors. We accept the higher risk factor associated with construction work but think OSHA must recognize the high degree of specialization involved in putting a building together. We believe OSHA needs construction specialty inspectors who can help us minimize the high accident and death rates in the industry.

There is one other issue which I would like to address and which I briefly alluded to earlier about small-scale, short-duration renovation work done in a Paterson, New Jersey hospital. The issue is indoor air quality. It's a complex one yet an area which OSHA has virtually ignored. We are increasingly involved in it because of all the rehab, renovation, and remodeling work which we must perform in occupied buildings. One of our great concerns is preventing the spread of asbestos fiber through the ventilation systems, elevator shafts and hall passages. But there are other toxic substances transmitted through ventilating systems which affect the occupants as well. The problem escalates in buildings which draw little fresh outside air and rely instead on filters to clean the closed system. Unless the filters are conscientiously cleaned and/or replaced, they can continue to circulate toxins for months after a remodeling job. In addition, the mechanical equipment chambers must be inspected and cleaned every six months. This is not being done in most instances.

We would like to see OSHA develop through regulation, bidding specs for contractors and engineers that would specify the proper controls and procedures which must be followed on work done in occupied buildings. We also believe a method could be developed for contractors to monitor the environment both inside and outside the work area and record it in their logs. Again, this would require review by an inspector competent in the construction industry setting.

To summarize, Mr. Chairman: We believe OSHA is doing too little because there are too few inspectors; we are concerned about the quality of the inspection force and have been appalled by the inspector inexperience and cavalier attitudes encountered in the situations described. OSHA has created a written formal complaint system which is unwieldly and time-consuming for union representatives in the construction industry where job movement and mobility are constant characteristics.

OSHA inspectors are bogged down with administrative functions which hamper their ability to perform job safety and health inspections. There are few inspectors who know much about construction, yet construction is an acknowledged hazardous industry with changing technology. Clearly, OSHA's inspector training needs improving. A part of that improvement should include specialization in building design, engineering and construction. I have offered some data which we have available on the kinds of OSHA citations issued on sheet metal construction jobs and they are not impressive.

The amount of asbestos containing material going into new construction is vastly reduced from 15 years ago. But the buildings constructed 15-20 and more years ago are undergoing renovations which create entirely new episodes of exposure as the asbestos is disturbed. This time the buildings are frequently occupied, endangering an even greater worker population. Indoor air quality is being addressed to a certain extent by the EPA and amendments to the Toxic Substances Control Act. But these are currently limited to asbestos in schools. In the meantime—and I mean daily—long after remodeling work is completed in commercial and public buildings, asbestos fibers and other toxins continue to flow through sick buildings making sick workers of its occupants.

We hope OSHA will listen to the concerns raised by us before this committee. We appreciate the opportunity to raise them.

Senator DODD. Jim, we appreciate your being here today as well.

Mr. COLE. It is a pleasure to be here, and I'd like to thank you on behalf of the Iron Workers for giving us this invitation.

First of all, Senator, I would like to say that our General President, Jake West, wanted to be here, but he was tied up at the AFL-CIO convention, and that's why I am here as his substitute.

I am here today to offer my union's whole-hearted support for Senator Dodd's bill. The needs of the construction industry for too long have not been given enough emphasis by the Occupational Safety and Health Administration and by Congress.

We supported the enactment of the Occupational Safety and Health Act, and we continue to recognize the need for that act. But almost 20 years of experience have taught us that the existing act does not provide the necessary mechanics to protect construction workers in the Nation's workplaces.

It is my view and the view of the Iron Workers' Union that the best way to ensure a safety and health work environment for construction employees is to enact the kinds of provisions found in Senator Dodd's bill. These provisions will be of tremendous benefit to construction workers and will, I believe, help to reduce the numerous deaths and injuries in our industry.

OSHA now says that the proposed legislation is unnecessary because adequate protection can be afforded to construction workers under the present act and administration. If this were the case, our industry would not have one of the highest rates of injury and death in the country.

It therefore remains necessary for Congress to take this action and strengthen the mandate to provide a safe workplace for its construction workers.

This committee is well aware of the statistics demonstrating that the construction industry is, without question, one of the most, if not the most, occupationally dangerous industries.

Further, there can be no question that iron workers perform some of the most dangerous jobs in that industry. It is the iron workers who erect the initial framework of buildings, structures and bridges to establish a workplace for all the other construction trades. Until the initial framework is erected, there is no place against which to lean ladders or from which to hang nets. Thus we provide the erected structure upon which the OSHA standards are based. Not only does our craft require special skills, but the nature of our work is unique.

With the exception of a very few field inspectors who work out of the area offices, OSHA has much difficulty in understanding the iron working industry in a way that would enable it to write realistic and pragmatic standards. For instance, although OSHA has proposed standards regarding fall protection, those standards are inadequate when they apply to iron workers. OSHA has proposed that iron workers tie off using safety belts when erecting the initial framework; however, the iron worker has nothing to tie off to until we have erected a framework to tie from.

OSHA has also requested that we utilize ladders and scaffolds to protect ourselves in this initial erection process. But a quick glance at death and injury statistics for the unionized segment of our industry shows that ladders and scaffolds account for a large percentage of such deaths and injuries.

OSHA often fails to issue a standard at all despite overwhelming evidence of a need for such standard. In our industry, there is a paint called "slick paint" which is often applied to steel before it is erected. The name for the paint is appropriate because it is extremely slippery, especially when it gets wet. Iron workers continually have to walk on slick paint, and in doing so are subjected to a potentially fatal hazard. OSHA is well aware of this hazard. Both OSHA and NIOSH have issued studies showing the need for the regulation of the use of slick paint. Yet OSHA has not yet accepted slick paint as an issue that should be resolved by the revision of the steel erection standard.

These are just a couple of examples of problems that the agency has failed to address in a practical way. We need people in OSHA in Washington who are specialists in the construction industry and in writing construction standards.

We are vehement in our position that OSHA should accept the advice and expertise of its own Construction Advisory Committee who are appointed by the Secretary of Labor. We are very pleased with and look forward to Assistant Secretary Scannell's commitment that the Advisory Committee will play a much more important role in OSHA's deliberations.

We also need inspectors who know the industry and who work primarily or exclusively in construction. I do not intend my comments here to be a criticism of OSHA's present inspectors, but rather a criticism of OSHA's failure over the years to fulfill its commitment to hire inspectors with construction experience and to sufficiently train inspectors to recognize hazards in the construction industry.

There also has to be a realization that the construction industry is not composed of a homogeneous group of employees. There are numerous crafts in the industry, each with their own individual problems and hazards. Inspectors need to be trained in all aspects of construction work so they can go onto a project and recognize the hazards facing each construction employee.

Something must be done to stem what has been referred to as the "rising tide" of deaths and injuries in the construction industry. Obviously, legislation will not by itself ensure safe and healthful workplaces. The ultimate responsibility in this regard rests with employers. Nevertheless, Congress through this legislation can help by encouraging, educating and even forcing employers to live up to their moral and statutory obligation.

I thank you on behalf of the members of the Iron Workers and on behalf of all construction workers for the efforts you are making to protect their lives.

Senator, those are my General President's words. I would like to make a few comments on some of the things I have heard here this morning, with your permission.

First of all, let me give you a little background on myself--and incidentally, before I get into that, I would like to extend to you the greetings of your constituents from Connecticut. I talked to Teddy Bernard this morning; I saw your friends Joe Eagan, Dennis Foley and Pete Reilly—I was at a dinner with you for Pete Reilly a long time ago, his testimonial dinner——

Senator DODD. Foley, Eagan and Reilly—I'll tell you, that's not very homogeous there—the Irish are in control, I'll tell you.

Mr. COLE. Yes, sir. Anyway, I came out of the New York City area, and I guess I was born into the iron working industry. At the age of 17, I went on my first construction job. I did it when I went through college, got out of that, went in the service for a couple of years, came back, went to law school nights and worked as an iron worker in New York days. I used to have a lot of arguments with my father, who was the business manager of Local 40 in New York for many years and later went on to the international. We used to argue about one thing that seemed sort of significant to me here today. He always told me that construction safety began on the job, and he proved it in his own career many, many times by going on a job and just tying it up when people wouldn't cover holes. He sat 100 men down one time and had two people take a cross-cut saw, cut the plank to suit the holes. This was in 1983. It goes back a way.

But anyway, when I came into Washington, what we argued about was he said it had to be on the job, and I said, well, when you're doing it on the job and you get involved with OSHA—and we did in 1972, and he was head of the Iron Workers Safety Committee at the time—I said they can do a real job on you with the regulations.

Now, I want to preface my remarks by saying this. The OSHA officials that I have met since I came to Washington—and I have been involved with them since 1972 and with the Safety Committee of the iron workers, which I now chair, with the Building Trades Committee, and also with our joint Labor-Management Safety Committee all these years—are well-meaning, very capable, very well-intentioned people, and I don't want to say anything derogatory about them. But my problem, when you talk about legislative versus administrative changes, is very simple. I have watched it for many, many years. I have watched the administrations come, and I have watched the administrations go. One of the things we are asking for—and as you said before, we did want our own agency, and instead you are proposing legislatively that we would get at least our own department over there that would be cognizant of our needs and receptive to our needs. On my left is Steve Cooper. Steve Cooper was the first Special Assistant for Construction appointed under the Carter Administration to the Assistant Secretary. When the Reagan Administration came along, they did away with his job; they no longer felt there was a need for that.

So my point is that unless it is done legislatively, we'll be in the same boat. As the administrations come and go, they can either decide to have that kind of an operation, or they can decide to do away with it.

I am very happy to see Mr. Culver aboard. I think he is a real asset. I think his office is a real asset. I would compliment the OSHA Administration for putting that into effect. But again I would point out to you that I think it is very, very important that it be done legislatively rather than administratively, for the obvious reasons that I just brought up.

The other thing that I heard here this morning that you raised was can one individual be an expert in all areas. I grew up in this. That is all I ever heard in my whole life was iron work. I sometimes think that it would be difficult for any individual to be completely knowledgeable about all of the different facets of construction and all of the different trades, let alone be completely knowledgeable in all of the different industries.

So I think it is absolutely essential and extremely important that we have individuals who have the practical experience rather than just the professional experience. I can remember one time being on a tier job in New York, working with my uncle. We were plumbing up an offset which some engineer had designed. We were out on the steel, and I can remember my uncle saying—and maybe it illustrates the point extremely well—he said, "I'd like to get the fellow who designed that out here with us so he'd know what we have to go through." Maybe he'd be a little more cognizant when he designed something that you have to erect it, and you have to build it and you have to plumb it up and make it straight.

I think that those things are things that I wanted to at least call to your attention and tell you how we feel about them. I am sure there are many more that would come to my mind if we had that kind of time. But I certainly do appreciate all the efforts that you are making.

I'll conclude with this. I remember L'Ambiance Plaza, but before that, I remember the Saint Mary's disaster when that cooling tower came down. And I'll put it to you this way, Senator. The day after that happened, Steve Cooper was there, and I went in with Jack Lyons who was then our general president. We flew in and met at that site. When I got home that night after meeting with the officials of OSHA, the general secretary of the union who I worked for, who was president and who testified before you not too long ago, left a message for me to go back with him Sunday. I went back to the funeral of the nine iron workers who were buried from that school.

I think that really brings it home when you see all the people who were involved in that. That same day, I took a ride in the scale box up to the top of that job where it collapsed, and I saw the concrete—as a matter of fact, I put some in my pocket—and how the whole thing had come down.

Then, when the tragedy happened up at L'Ambiance Plaza the following day, President Drake and myself and Steve Cooper also went up to that, and we saw all the human horror of those people standing around there, waiting for the people to try and get the bodies out and to see if anybody was alive.

I think that's what brings it home that something should be done, and it is very necessary that it be done.

On behalf of the Iron Workers International and on behalf of President West, I'd like to thank you personally for all your efforts. We sincerely appreciate them

Senator DODD. Thank you, Jim, very, very much for those comments, and I appreciate—so often, we talk about numbers and statistics and forget that those statistics have faces and families. In fact I regret that today we didn't invite some of the families of the L'Ambiance Plaza people just to sit in the hearing room; they certainly could have been here, and I maybe should have extended an invitation for them to be here, because it does remind you from time to time that these tragedies go far beyond just the time of the tragedy itself and the funerals and the rescue efforts, that they continue for years, the effects on the families and what it means. And there is no way you can calculate—there is not a price tag you put on that. I always find it somewhat annoying when people are trying to calculate the costs of these things. I don't know how you put a price tag on human lives and families and lost fathers and God knows what else is associated with it. So we thank you.

Steve, did you have any particular comments you wanted to make at all?

Mr. COOPER. Just two real fast ones. As was pointed out, we do have a concern in the Standards Department which we discussed earlier of construction expertise in those areas, and also in the compliance area. In 1980, as Jim pointed out, I was involved with OSHA in charge of construction safety for this agency, OSHA. We spent quite a few weeks and months putting together a program in which we would come up with the construction space list, the criteria, etc, etc. That still exists. Nothing happened on that. And I am very happy to see Gerry Scannell and Allan McMillan looking into that area. I am not naive, but I have a lot of faith in those two individuals sitting behind me, and I think they will work with us to move some of this down the road and get going on the right track.

Thank you.

Senator DODD. Good. I have sort of the same reaction as you do, and I'm glad to hear you say that as well.

Let me ask just a couple of questions to the two Jims, and please jump in any time you want to—I don't know if it is proper to a

Senator to tell a counsel to do that, but if you so feel moved, don't hesitate to do so.

You pointed out, Mr. Cole, obviously, the debate with your dad about where the responsibility begins. We heard OSHA say—and I noticed heads nodding in agreement—that when these things happen, obviously, we want to see OSHA do a better job, but none of us believes it is all OSHA's responsibility. But obviously, having construction sites where the employer and the employees are as knowledgeable about safety standards as possible is essential to eliminate or at least reduce substantially the necessity to have inspections occur.

One of the arguments we get from time to time is that, well, look, a lot of these accidents occur because the fellows working on the job are creating their own unsafe conditions. They are doing things they shouldn't' be doing, and they know better, or they should know better.

What do the iron workers do, for instance, Jim, to see to it that the worker on the job gets the kind of training and expertise necessary to be able to take care of himself and his coworkers on the job—and to what extent should we do more?

Mr. Cole. We have an apprentice training program as I am sure you are aware, and essentially, safety is taught not only as a special subject during that apprenticeship, but it is also interspersed throughout every other course. So that would be one of the main contributions that we make to trying to make the job a safer workplace.

We are in favor of what they call safety meetings on jobs. Some people call them "toolbox meetings"—they have all kinds of names on them. But we feel that there should be more of that, Senator, where there is time set aside where the foreman actually goes ahead and conducts a little bit of a safety meeting. It doesn't take long. I attended many of them when I was on a job.

Unfortunately, I would say this to you, though. Many of the ones that I attended would be after a rash of accidents as a young man; after two or three people got hurt, they decided they needed a safety meeting. I always thought that it would be much more effective if they had them regularly, like once a week on a Monday morning, or whatever time they had put aside, for 10, 15, 20 minutes, just to remind the people of what they should do.

There is no question about it—I would say that the overwhelming majority of the unionized segment of the industry know what they should do. The problem I have always felt myself is that if you do the same thing over and over and over again, you have a tendency to become complacent and not to watch what you are doing. And in our segment of the industry, in the iron working segment of the industry, you don't have that many chances to make mistakes

Senator Dodd. What about retraining or training up? I would presume what is happening in the construction trades is similar to what is happening in almost every other field; the idea that you could learn a skill and for the most part of a career, at least years ago, the technology didn't train substantially. Today, it changes so fast—before a job site is complete, there are new concepts coming in, new ideas, new equipment.

To what extent can organized labor play a part in seeing to it that the worker stays on top of the new technologies; how much responsibility should it be of organized labor, or should the employer assume that responsibility, or is it a joint one in your view?

Mr. COLE. We have journeyman upgrading courses—I'm talking about with the iron workers—and through that journeyman upgrading, safety is also part of that process. Steve himself is involved in foreman training.

Do you want to comment, Steve?

Mr. COOPER. Yes, Senator Dodd.

We, like most international unions, are participating in what we call in our international union a national fund, that is, a joint labor-management commitment to put certain cents aside per each hour worked to provide additional training in the areas of safety and health and other areas. That is in addition to the apprenticeship program which is a 3-year, Federally-registered program, for training.

In addition to that, we in the iron workers have gone very heavily into foreman training because the foreman as we consider has the care, custody and control of that job. Regardless of what OSHA says, regardless of what Congress mandates, that foreman is the one on the job that directs that work force, etc. We are working very heavily with the foreman training. In fact, we have one coming up in Seattle a week from now. And we have about 200 foremen in Detroit, 300 in Chicago, those large amounts. We don't train them all at once, but we train them in that amount of people. It works very well.

Mr. COLE. The National Training Fund is joint labor-management. So we would definitely consider it a joint labor-management responsibility, and it is financed, Senator, through a cents-per-hour contribution on work throughout the country.

Senator DODD. OK. Jim, do you want to comment on any of this?

Mr. LAPPING. Yes, sir. As you know, in our legislation—your legislation—we have worked so much with you we like to say it is ours jointly——

Senator DODD. I accept that. Victory has a thousand fathers. When you start calling it my legislation, I'll know we're in trouble.

Mr. LAPPING. I say "ours" because the contractors have attended numerous hours, as the engineers have, in helping your staff—Jeff Anders and Patty McGovern have really provided the hard work to help us put this together. And from these meetings with the contractors, the contents of this bill, the real essential element of this is consistency around the country, because we have experience with contractors on certain projects going millions of man-hours without even a lost time injury let alone a fatality. So we know the techniques and the criteria that are necessary. And your bill points out those areas in which the contractors—hopefully, in their testimony—we all agree are the elements needed. The problem is even within some excellent companies, they have projects that do not complete the implementation of the safety program, and your legislation provides for that. I think we need consistency, and our tradesmen need to know—as Mr. Cole pointed out, we have the skills and the knowledge—when they go on jobs, there will be a minimum program that they can comply with. That has been the problem is there is such a differential between areas of the country and types of projects.

Senator DODD. Let me ask you—and Jim Cole, I certainly don't disagree with you as a practical matter here, and obviously, as the author of the Senate bill, I am interested in moving things—but I am intrigued by your comment about the administrative versus legislative approach to things, and it is hard to disagree with you because you are absolutely correct, and Steve Cooper is a living example of it—you do find that things change. And obviously, if something is done by Executive Order, it can be undone. But is that true across-the-board here? Are there some things we can get OSHA to do administratively, changes that don't require statutory change and laws—while maybe it would lock it into concrete more to have it by statute, should we really be holding out for that if in fact we can get some of these changes done administratively?

Would any one of you like to comment here?

Mr. LEIFER. Senator Dodd, I would like to comment because I think it is very important to have some legislation as opposed to regulation or administrative policy change. We have tried to present in our statement today three reasons why we think legislation is necessary. There may be certain parts of your bill which could be done just as well administratively——

Senator DODD. That's my point that I'm trying to make.

Mr. LEIFER [continuing]. But I would say for the most part, we summarized the six major points of the bill, for the most part, we think that however well-intentioned the OSHA political appointees are at the moment, that legislation is necessary.

In addition to the points we have made in the written statement, I was thinking while the discussion was going on that an other advantage of legislation is that it is much more difficult for employers successfully to legally challenge in court statutory requirements as opposed to requirements that are imposed pursuant to regulation.

There is always the issue—when a construction contractor will go to court, and we will be engaged in protracted litigation, aside from all the time and money that that costs—there is always the issue which is raised by the contractor in court as to whether the regulation correctly reflects the statute, or did OSHA have the authority under the statute to promulgate the regulation. Obviously, if the requirement is in the statute, that sort of a court challenge will not be available.

In addition, as we said in the statement, your bill contains such creative approaches that I think in many cases the OSHA Act as it presently stands would not permit that. I think that legislation is required with respect to many of the provisions in the bill.

One example and one provision which I think is one of the finest if not the finest provision in the bill is Section 7, which requires either the construction owner or the prime contractor or, if it is a large job that has a construction manager, the construction manager to appoint a construction safety specialist, who does not have to be a professional engineer, but he has to be somebody who has received a standardized training program more so than an employee and about the same with the OSHA construction inspector.

Now, that construction safety specialist will have the responsibility for the entire work site, not just for particular employees or particular employers. I think one of the main deficiencies in the OSHA Act today as it applies to the construction industry is that the act is not well-suited to the multiemployer work sites which are common in the construction industry. The act is primarily suited for general industry, industrial workplaces, for example, where the owner of the project is also the employer of the project and there is only one employer on a construction site. As we said in the statement, some construction sites today can have 100 different employers. There is a great need to have a construction safety expert to be able to monitor all of the employers on that project to make sure that all the employers are properly implementing their own safety and health programs, to make sure that all of the employers are complying with OSHA standards and regulations.

I don't think that that sort of an approach would be authorized under the statute today, or at least I think there would be a serious legal question as to whether imposing requirements on the prime contractor or on the construction manager and on the construction safety specialist to monitor all of the employers on that project, I think there would be a serious issue as to whether the present act permits that. And yet I think this is one of the most important provisions in the bill.

Senator DODD. Thank you very, very much.

Yes, Jim.

Mr. COLE. I wont' give you a technical explanation, but I'd like to give you some history on it. For of the years that I've been around, most of the things that you've got in this bill, I have heard discussed over and over and over again between the building trades and OSHA, and representatives of the different international unions in OSHA. And depending on the administration and what the situation was at the time, what we would get—and again, I imply no insincerity on the part of anyone over there—but you would get the standard answer: We will consider it.

So I would say this to you, Senator. For the sake of due to the nature of the way the thing is set up and the fact that you constantly have changes, if you are going to get any consistency and any longevity, I would say for myself I firmly believe that legislation is necessary as opposed to strictly the administrative process—maybe not for every one of them, but certainly for most of them

Senator DODD. I hear you, I hear the message.

I thank you again. There may be some additional questions that will come up in the next few weeks from other members of the committee, which we will submit to you for your written responses.

I personally want to thank you for being here today, and again with the pressures—when we set up the hearing date, we didn't necessarily anticipate you would be in the middle of a national convention, although I guess we should have anticipated that.

Mr. COLE. I have to tell you before I leave—this morning I got up and I went down to the office at 6:30 a.m. to go over some things for this, only I went to leave the Sheraton Park Hotel at 6:15 a.m., drove the car out of the garage and ended up sitting there for half an hour behind his motorcade. The dear officer had the car parked across the entrance, and you weren't going to get out. I got cut in the rain to argue with him, and the umbrella went the wrong way.

Thank you very, very much

Senator **Dodd**. Thank all of you very much. We appreciate you being here this morning.

Our next panel of witnesses are representatives from the construction groups, and I want to express my gratitude to them. It can be either an advantage or a disadvantage, I guess—an advantage to hear what others have said, but you end up having to wait around all morning to hear these people. But we thank you for coming out this morning.

So we'll call Mr. Ken Paradis, who is the Vice President for Labor Relations and Safety of the National Constructors Association; Mr. Kirk Fordice, Senior Vice President, Associated General Contractors here in Washington; and Mr. Ed Travis, with Associated Specialty Contractors, Inc., in Washington, DC. We thank you all for coming this morning.

Since we're running out of time, again, all your statements will be included in full in the record, and if you could try and limit your formal comments to about five minutes apiece, we can move along and not keep you any longer than necessary.

Again, I thank you all for being here. We will begin in the order that I have introduced you.

I recognize Senator Thad Cochran of Mississippi. We are pleased to have him join us this morning.

Senator **Cochran**. Thank you, Mr.Chairman. Could I just make some brief remarks?

Senator **Dodd**. Absolutely.

Senator **Cochran**. I am not going to take any time away from the panel because I know we are here to hear testimony from them and other witnesses who already testified this morning, but I am going to have to go to another meeting in just a few minutes so I may not get to hear all the testimony. I wanted to just introduce to you, Mr. Chairman, and to the committee Kirk Fordice who is a member of this panel. The witness list says that he is President of Fordice Construction Company in Delta, Louisiana, but I didn't want you to be misled by that. He lives in Vicksburg, MS. He is a very close personal friend of mine, and it is a pleasure to see him this morning and to be able to be here and welcome him to the committee and thank him for taking the time to come to Washington to help us understand the issues involved in this legislation.

Thank you.

Senator **Dodd**. He has been sitting here all morning, Thad, I can tell you, patiently listening to all the testimony from OSHA and our friends from organized labor. As I said, it sometimes can be a benefit because it gives you an opportunity to hear some of the comments. I am confident that our panel here will tailor whatever their prepared statements were to reflect some of the comments that were made here this morning.

But it is late, and you are not the end. I've got some constituents from Connecticut who are two panels away, so we are taking care of Mississippi awfully early. I'm going to hear it from the Connecticut crowd; these swamp Yankees don't take kindly to that.

Nevertheless, we thank you for coming by, Thad, and expressing your interest.

Ken.

STATEMENTS OF KENNETH A. PARADIS, VICE PRESIDENT FOR LABOR RELATIONS AND SAFETY, NATIONAL CONSTRUCTORS ASSOCIATION, WASHINGTON, DC, ACCOMPANIED BY JIM PAKENHAM, MANAGER OF SAFETY, EBASCO CONSTRUCTORS, INC.; KIRK FORDICE, SENIOR VICE PRESIDENT, ASSOCIATED GENERAL CONTRACTORS OF AMERICA, WASHINGTON, DC; AND ED TRAVIS, ASSOCIATED SPECIALTY CONTRACTORS, INC., BETHESDA, MD

Mr. **Paradis**. Thank you, Senator.

My name is Ken Paradis. I am Vice President for Labor Relations and Safety for the National Constructors Association. I recognize your request for the time period, and I'll try to summarize my remarks in the 5-minute allocated time.

I have with me today Jim Pakenham, Manager of Safety for EBASCO, seated on my left here; and Jack Hargett who is with us today, who is Vice President-Government Relations for Parsons Constructors. Both EBASCO and Parsons are NCA members.

NCA is pleased to have the opportunity to testify today with regard to occupational safety and health in the construction industry. NCA is comprised of 18 engineer-constructor companies who employ union construction workers on a national basis. A recent trade publication survey of the top 400 contractors in the United States revealed that 26 large firms reported more than a billion dollars worth of contracts in 1988. I am happy to say that 11 of those 26 companies in the billion-dollar club are NCA member companies. Furthermore, that same survey showed that five of the top six U.S. contractors are NCA members.

NCA member companies historically work between 75 to 100 million man-hours per year, providing many thousands of jobs for the building trades craftsmen across the United States. NCA member companies have worked all these millions of man-hours with a combined safety and health performance that far exceeds the industry average. In fact, it is less than half of the rate for heavy construction on some of the factors that we use to measure performance in the construction industry.

NCA and its member companies have a long history of leadership in construction safety and health, have established a national reputation for good and effective safety and health management, and we work throughout the United States to improve safety and health in construction.

Almost 20 years after the enactment of the Occupational Safety and Health Act, we find that although we have some improvements in construction safety and health performance, a reading of any set of simple safety statistics will show that construction is still among the leaders in injury rates for all industry sectors. Some construction employers, as shown by NCA member companies, can improve their performance. Moreover, the Federal Government should provide the incentives and the assistance to promote an environment of improved construction safety with an emphasis on education and training.

Safety and health legislative issues, as you can well imagine, have been discussed at length among NCA member companies. As a result, we have documented our position on these various issues dealing with construction safety and health. The attached NCA position paper dated October 1989 is included as part of our testimony today in order to identify a few of the issues faced by the industry and offer some recommended solutions.

In summary, our position paper sets forth the following concerns and suggestions. We feel that there should be provided a strong Office of Construction within the levels of OSHA to deal with the unique construction job site conditions faced by construction employers. We have heard a lot of comments today about construction, the uniqueness of the industry, and we feel very strongly that the industry has to be dealt with because it is so unique and so different.

This office should be empowered to deal with construction safety and health regulation, education, training, enforcement and assistance. This Office of Construction is preferable to the concept of a separate agency outside of OSHA to deal with construction safety. The creation of a separate agency would lead to a bureaucracy for the employers, and we are opposed to that concept.

There must be a streamlining of the construction standards-setting process with appropriate input from industry practitioners.

We are concerned that legislative initiatives such as high-risk and right-to-act could be counterproductive.

We suggest a program that would require contractors to have a designated individual responsible for construction safety and health on the job site. It is recommended that construction safety and health specialists be required to go through a certification process.

NCA would not support an automatic increase in penalties but would instead support an agency effort to study the entire penalty structure. I think this is very important and needs to be done. This study should also include an improved structure of citations that is readily understandable by the industry.

We feel that there should be greater emphasis on training for employers, for employees and for OSHA construction inspectors.

NCA believes that the whole area of recordkeeping, incident reporting and project reporting can be designed to be more simplified for the employer and more meaningful to the regulators. We believe recordkeeping requirements should provide basic information that identifies industry performance and compliance without imposing undue burdens on employers. We believe that contractors should report to OSHA about the start of each project and other information that would streamline the inspection process.

We think it should be a mandatory requirement for a written safety and health program for each construction project. Such a written program need not be elaborate, but should meet basic minimum program requirements as established in cooperation with OSHA and construction industry groups such as the Advisory Committee.

NCA supports the concept of voluntary formation of labor-management project safety committees to deal with safety and health concerns at the project level.

We recommend that construction projects should develop and implement emergency evacuation plans for each project just as OSHA should develop and implement response teams that can deal quickly with major construction incidents.

NCA is also concerned with the apparent diminishing impact of NIOSH in its role in providing industry basic research for safety and health. It is suggested that NIOSH may be more suited to function as a research arm under the Department of Labor.

We are pleased to share with you today our views on the areas of concern with construction safety and health as well as our suggestions for improving the safety performance of those who must live and work in what is still one of the largest industries in the United States.

We welcome your questions.

Senator DODD. Ken, thank you.

[The prepared statement of Mr. Paradis follows:]

PREPARED STATEMENT OF KENNETH A. PARADIS

Mr. Chairman, Members of the Committee: My name is Kenneth A. Paradis, vice president—Labor Relations and Safety of the National Constructors Association.

Accompanying me today is James E. Pakenham, manager of Safety for EBASCO Constructors, Inc. and vice chairman of the NCA Safety and Health Committee, and W. Jack Hargett, vice president—Government Relations, Parsons Constructors Inc. and chairman of the NCA Government Affairs Committee. Both EBASCO and Parsons are NCA member companies.

The NCA is pleased to have the opportunity to testify today with regard to Occupational Safety and Health in the construction industry.

The National Constructors Association (NCA) is comprised of 18 engineer-constructor companies who employ union construction workers on a national basis. a recent trade publication survey of the top 400 contractors in the United States revealed that 26 large firms reported more than one billion dollars worth of contracts in 1988. Eleven of those 26 companies in the billion dollar club are NCA member companies. The same survey showed that five of the top six U.S. contractors are NCA members.

NCA member companies historically work between 75 to 100 million manhours per year, providing many thousands of jobs for the building trades craftsmen across the United States. NCA companies have worked all these millions of manhours with a combined safety and health performance that far exceeds the industry average. One of the most familiar yardsticks for measuring safety performance is the incidence rate for lost work day cases. The industry average for a 3 year period (1985-87) for large industrial construction work is 6.3, or 6.3 lost work day cases for each 100 full time workers or 200,000 manhours. NCA members as a group for the same 3 year period have established an average incidence rate of 2.5 or an incidence rate that is less than half of the rate for heavy construction contractors.

The NCA and its member companies have a long history of leadership in construction safety and health. Having established a national reputation for good and effective safety and health management, NCA has worked to improve safety and health on construction sites throughout the United States through development of safety training programs which are made available to all construction employers. As an example, NCA produced, with the assistance of an OSHA new directions grant, a nationally recognized construction safety training program called the work environment safety training program or the "west" program. The west program consists of 17 training modules covering various topics of construction safety. With the new requirements of hazard communication, NCA has just recently developed three additional modules for the west program. These new training units are specifically designed to provide assistance to construction employers in meeting the hazcom requirements. With newly provided assistance through the OSHA new directions program, NCA has just completed a series of 3-day seminars in various regions of the country. The seminars consisted of a comprehensive 24 hours of training on hazard communication for construction supervisors. Upon completion of the seminar, these supervisors were armed with knowledge and data to enable them to conduct their own hazard communication training programs for their own employers. This "train the trainer" concept will multiply the impact of this training to many employees for years to come.

As another example of innovative leadership in the field of construction safety and health, NCA is in the process of field testing a unique computerized system called "MILT" or materials information lookup and training system. The "MILT" system is designed to simplify the hazard communication requirements, especially as they relate to the construction multi-employer jobsite environment. The system is designed to comply with the MSDS (material safety data sheets) requirements and will provide training on hazard communication for employees on an individual construction project for a specific hazardous material. MILT is designed for use by typical construction jobsite personnel with a minimum of computer training. Once considered a 4 year development project, the system is now anticipated to be a marketable product and will be available to the industry for their benefit and use by first quarter 1990.

NCA has worked with the occupational safety and health administration from its inception and continues to provide input in the OSHA standard promulgation process. Active support for the Department of Labor's advisory committee on construction safety and health is provided by the NCA.

Almost 20 years after the enactment of the occupational safety and health act, we find that although there have been some improvements in construction safety and health performance, a reading of any set of simple safety statistics will show that construction is still among the leaders in injury rates for all industry sectors. Although construction is historically a high-risk industry, some construction employers, as shown by NCA member companies, can improve their performance. Moreover, the federal government should provide the incentives and assistance to promote an environment of improvement in construction safety with an emphasis on education and training.

Safety and health legislative issues have been discussed at length among NCA member companies. as a result, we have documented our position on these various issues dealing with construction safety and health. The attached NCA position paper dated October, 1989 is included as part of our testimony today in an effort to identify a few of the 'issues faced by the industry and to offer some recommended solutions.

In summary, the NCA position paper sets forth the following concerns and suggestions:

—Provide for a strong office of construction within the top levels of OSHA to deal with the unique construction jobsite conditions faced by construction employers. This office should be empowered to deal with construction safety and health regulation, education, training, enforcement and assistance. This office of construction is preferable to the concept of a separate agency outside of OSHA to deal with construction safety. The creation of a separate agency would add to the bureaucracy for employers; that is opposed by NCA members.

—A streamlining of the construction standards setting process with appropriate input from industry practioners.

—A concern that legislative initiatives such as high-risk and right-to-act could be counter-productive.

—A program that would require contractors to have a designated individual responsible for a contractor safety and health program. It is recommended that construction safety and health specialists be required to go through a certification process.

—NCA would not support an automatic increase in penaltiesbut would support instead an agency effort to study theentire penalty structure. This study should also include an improved structure of citations that is readily understandable by the industry.

—Greater emphasis on training for employers, employees, and OSHA construction inspectors.

—NCA believes that the whole area of recordkeeping, incident reporting and project reporting can be designed to be more simplified for the employer and more meaningful to regulators. We believe recordkeeping requirements should provide basic information that identifies industry performance and compliance without imposing undue burdens on employers. We believe that contractors should report to OSHA about the start of each project and other information that would streamline the inspection process.

—Establish a mandatory requirement for a written safety and health program for each construction project. Such a written program need not be elaborate but should meet basic minimum program requirements as established in cooperation with OSHA and construction industry groups such as the construction advisory committee.
—NCA supports the concept of voluntary formation of labor-management project safety committees to deal with safety and health concerns at the project level.
—The NCA recommends that construction projects should develop and implement emergency evacuation plans, just as OSHA should develop and implement response teams that can deal quickly with major construction incidents.
—The NCA is also concerned with the apparent diminishing impact of NIOSH in its role of providing industry basic research for safety and health. It is suggested that NIOSH may be more suited to function as a research arm under the department of labor.

We are pleased to share with you today our views on areas of concern with construction safety and health as well as our suggestions for improving the safety performance of those who must live and work in what is still one of the largest industries in the united states. We welcome your questions.

ATTACHMENT

NCA Safety and Health Position on Current Safety and Health Legislative Issues

1. *Separate Agency for Construction Safety and Health*—The NCA would oppose the creation of a separate agency due to the fact that it would be creating a redundant agency. "Turf problems" would continually exist between the two agencies, and additional funding would be required which is not politically feasible at this time. If the current agency made some meaningful changes such as elevating the office of Construction, Safety, Health and Education, and was better managed, the current system would work fine.

2. *Standards Setting Process*—The NCA would support a call for restructuring of the current standard setting process:

—Subgroups comprised of OSHA, labor and the construction employers to draft new standards, or incorporation of any standard designed for general industry.
—Three (3) year maximum on drafting new or revising existing standards.
—Automatic five (5) year review of each standard.
—Standards must be performance oriented.
—Utilization of the Construction Advisory Committee throughout the standard setting review process.
—A solicitor assigned to each standard from start to finish to provide ongoing legal interface.
—Setting priorities for standard setting—statistical data from BLS or NIOSH should be used to establish priorities for standard setting. Also a cost benefit analysis should be utilized prior to implementing a new standard.
—Sixty (60) day maximum review by OMB.

All OSHA standards should be promulgated separately. No general industry standards should be applied to the construction industry without review by the Construction Advisory Committee.

3. *Penalties*—The NCA would oppose an increase in penalties at this time. We would support a study by OSHA of the current penalty structure based on sound accident prevention statistics, a clear definition of the current penalty assessment criteria, and uniform application of penalties to all employers for violations must be implemented.

4. *Citation Categories*—The NCA would support a better defined category structure for citations, i.e.:

—Diminis
—Other
—Serious
—Repeat.
—Willful

Clear definition for each category, how and when they are applied, and a structural base and maximum penalty for each category)

5. *Training*—The NCA supports any actions by OSHA and Congress to increase training and education programs for construction. This would include special construction training for compliance officers as well as employers.

6. *Recordkeeping*—The NCA supports restructuring the recordkeeping system and defining the categories suitable for construction. Also we believe penalties for rec-

ordkeeping should not be assessed unless evidence of fraud is discovered. Recordkeeping is an important administrative function but does not save employee lives or improve unsafe working conditions.

7. *Incident Reporting*—The NCA supports notification to OSHA when three (3) or more employees are seriously injured in the same incident or a fatality occurs. Notification should be made within twenty-four (24) hours after occurrence, with follow-up by OSHA within 48 hours after notification. An alternate method of reporting such as an 800 telephone number should be established.

8. *Project Reporting*—The NCA supports project notification to OSHA prior to the start of the project. Notification should be a 3" x 5" card that can be mailed in at no cost to the employer. It would include the following information:

Company Name
Address
Phone
Expected duration of work
Type of work
Estimated number of employees
Name of senior company person on site.

In lieu of the post card, an 800 telephone number should be established by OSHA for contractor notification of short duration (1-5 day) jobs.

9. *Hazard Communication*—The NCA supports the development of a Hazard Communication standard designed specifically for the construction industry.

10. *High Risk Notification*—The NCA is opposed to a High Risk Notification Bill as it is basically redundant to the existing Hazard Communication standard provisions.

11. *Right To Act Legislation*—The NCA is opposed to any legislation of this type. The employee is currently covered by the 11(c) process in this regard.

12. *Stop Work*—The NCA is opposed to any different approach than is currently offered by the Act.

13. *Certification of Construction S&H Specialist*—The NCA supports the concept of each contractor being required to have a designated individual, resident to the project, responsible for implementing the contractor Safety and Health program. Such a program could include:

A designated individual who would be responsible for monitoring compliance with the minimum guidelines set by the Secretary for such programs' content.

A designated individual who would be responsible for completion of, or assuring completion of, a hazard analysis plan for work being performed by his employer.

A designated individual who has had training on construction safety and health (or equivalent training or education) through a structured course.

The designated individual would be required to take refresher training on current Safety and Health subjects every three years.

This requirement should be phased-in 3 years after legislation is enacted.

OSHA should be required to see the training certification of the person responsible for the contractor safety and health program during an inspection.

Requirement should apply to contractors with 10 or more employees on site. (Single trained person for 10 or less working multiple sites)

Employers responsibility for safety and health should not shift to the construction safety and health specialist, but remain with senior management.

14. *Contractors Safety and Health Program*—The NCA supports OSHA requiring that:

Each contractor shall have onsite a written safety and health program tailored to the work the contractor is performing.

The program shall address administration, monitoring, training, compliance, emergency plans, and hazard analyses.

The program shall be available on the project for OSHA to review during an inspection.

Failure of a contractor to have this program will result in a willful citation.

Minimum criteria for contractor safety and health programs shall be developed by OSHA within one year after enactment of legislation.

Contractor safety and health plans must include requirements for completion of task (phase) safety analyses specific to the work being performed by that contractor and minimum requirements for such analyses.

Contractor Safety and Health Plans should include requirements for enforcement including a disciplinary action plan for employees who violate the project/employers safety and health plan.

15. *Labor/Management Safety Committees*—The NCA supports the concept that:

Committees should not be mandated by legislation.

As a matter of record or policy these should be encouraged under management supervision by the contractor.

Overall cooperation between labor and management is fundamental and worthwhile, but the committee should not be a legislative issue.

Employers are responsible for the safety of their employees. This responsibility should not be delegated to a joint committee.

16. *Regional Catastrophe Teams*—The NCA supports the concept that:

OSHA should establish regional "catastrophe teams" that could be called upon to respond to major incidents.

Response teams should be made up of two senior OSHA compliance officers (construction trained), two recognized industry safety and health professionals, and a NBS (NIST) senior engineer as a minimum.

Other specialists should be included based on the nature of the incident.

This team would have standing authorization to respond immediately to the incident site, and take charge of the government investigation.

For the purposes of the investigation the team would be responsible directly to the Secretary or his designee.

This concept shall be in place one year after enactment of the legislation.

Upon completion of their investigation, OSHA shall publish a report on the accident/incident for general public review.

17. *NIOSH*—The NCA recommends transfer of NIOSH under the Department of Labor for increased continuity and better leadership in Safety and Health research programs.

Senator DODD. Kirk, we thank you for coming by this morning.

Mr. FORDICE. Thank you, Senator Dodd.

I want to let Senator Cochran know that we have now moved the office over to the Mississippi side, too, so we are all Mississippi and mighty proud to be a constituent totally of Senator Cochran. We are old friends, and I just wanted to say that we are totally Mississippi now, Senator Cochran.

I am the President of Fordice Construction Company. We have been in business for over 40 years and have fortunately, thank goodness, never had a fatal accident on any of our work, nor have we even had a loss of a limb. We are very, very proud of that, and I think that we know something about the subject of construction safety, and I think that we have even discovered the key to it, which I'll mention in a moment. I am going to try to stay well within that five minutes. We have submitted our longer statement, and you may have some questions, Senator.

We in AGC—and I speak for AGC; I happen to be the Associated Vice President of Associated General Contractors, and that's why I'm here—we are 32,500 companies, employing over 3.5 million construction workers, and we have 104 chapters from one end of this country to the other, so we are deeply, deeply involved in the industry.

AGC was founded on the principle of promoting safety on the job site. Our organization dates back to 1918. And it is so integral that our bylaws say that AGC is going to make every effort to provide safe working conditions on construction projects and to promote safe working habits.

We have a full set of construction craftsmen curricula developed over the years, all of which has integral to it safety training. We have supervisory training curricula, all of which have an integral section on safety training. We produce videos. We constantly emphasize safety. Our "Publications and Services" catalogue, which I was looking at just before I came up here, has several pages devoted just to safety manuals and guides, for instance, for hazard communication, how to run a drug-free job site, and so forth and so on. We are thoroughly dedicated to the proposition.

But Senator, I think that over the 40 years that I'm talking about having been involved in and a good part of that run a construction operation, I am convinced that safety is in the mind of the individual on that construction job site, and I am convinced that the way to run a construction job site is to be totally committed to the cause of safety from the absolute top management ranks right down to the bottom and see that everybody understand that; they must know that the top echelon of that company is totally devoted to it, and I hope all the people who work for us do.

So training and education is really the name of the game. We feel quite strongly that there is not particular need for a lot of new records, reports, programs, analyses and evaluations. What we should be about is this educational process.

We also feel very strongly that at some point in the history of this country that the employee has got to be given some modicum of accountability for his acts on the construction job site because therein lies the key. We as management can be totally committed—and most all of us are, by the way; I know contractors from one end of this country to the other in my job in AGC, and I don't know any of them who are anything but fully committed to the principle of a safe job site, not only for the humanitarian reasons, which of course is the most important, but also from the monetary standpoint because you cannot compete anymore from a workers' comp standpoint unless you are on a safe operation.

But since the employee is so important in there, at some time or other, we've got to hold him at least partially accountable for his own acts and for his omissions that might endanger his fellow employees. We think that is absolutely mandatory to any change in the safety regulations that we already have.

Drug testing is totally integral to success in this effort that we are all so interested in. Some 23 percent of all U.S. workers are using drugs on the job, the latest statistics show. Perhaps 50 percent of accidents involve people on drugs. What we need, I think, from the Congress of the United States is enablement as construction employers to perform drug testing without being impaired by local laws that restrict us from doing that.

Construction work is serious business. There are hazards. I'm never going to say that accidents are inevitable; I don't believe that. I believe we can prevent basically all of them. But because of these inherent dangers, there is no sense in tolerating any level of drugs at all, and that is AGC's policy is to have zero tolerance, no drugs on the job site. And we need your help in that. We need to be able to test employees for drugs.

We need to have positive incentives for job site safety and give a break to those employers who do better. Engineering controls or "things" are not really where it is at. Ninety percent of all accidents are caused by unsafe acts, not unsafe things, and we need to thereby emphasize education.

We want to work with you, Senator Dodd, and the committee and the Congress as a whole in promoting the cause of safety and coming up with some practical improvements in job site safety. We don't think a lot of excess regulations and recordkeeping will do that.

We hope our suggestions and recommendations will encourage Congress to refocus the legislative debate over construction job site safety and health back to issues which materially impact job site safety.

Thank you, sir.

Senator DODD. Kirk, thank you very much for those comments.

[The prepared statement of Mr. Fordice follows:]

PREPARED STATEMENT OF KIRK FORDICE

Good Morning. My name is Kirk Fordice. I am the president of the Fordice Construction Company, in Delta, LA. I am also the Senior Vice President of the Associated General Contractors of America (AGC).

AGC is a construction industry trade association that represents more than 32,500 firms, including 8,000 general construction contractors, responsible for the employment of more than 3,500,000 individuals. These firms perform more than 80 percent of the nation's contract construction of commercial buildings, highways, bridges, heavy and industrial facilities, and municipal-utilities facilities.

AGC has sought to encourage jobsite safety since its founding in 1918. In fact, the association's bylaws provide that AGC "shall make every effort to provide safe working conditions on construction projects and to promote safe working habits . . ." Today, AGC and its 102 chapters offer a broad array of safety programs, publications and services to all sectors of the construction industry.

As an example, AGC has just produced a videotape on personal protective equipment. This is the first in a series of new safety videotapes that AGC is now preparing to produce. AGC is also proud to be the 1989 recipient of the Business Roundtable's Construction Industry Safety Excellence Award for construction industry associations. AGC intends to use this $50,000 award to launch a hard-hitting campaign to encourage all construction contractors to make personal and professional commitments to implement sound safety programs.

AGC's safety philosophy is easy to express. Everyone has to think safety, and everyone has to have access to practical safety information, so that safe and healthy procedures are easy to implement. It is particularly important for practical safety information to be readily available to the small family-owned firms that dominate the construction industry. Ninety percent of AGC's membership qualify under the Small Business Administration definition of a small business.

AGC greatly appreciates this opportunity to comment on S. 930, the "Construction Safety and Health Improvement Act of 1989." AGC cannot support this proposed legislation, because its many requirements are inconsistent with AGC's basic safety philosophy. AGC welcomes the legislative debate over construction jobsite safety and health, but believes that Congress must first recognize that the vast majority of construction employers are small business men and women, and that these small, family-owned businesses do not have technical safety experts or Washington lawyers at their disposal.

The proposed legislation would greatly increase the complexity of federal safety requirements. The bill requires new records, reports, programs, analyses and evaluations, and if enacted, would generate many new federal regulations. At the same time, the bill does far too little to reach out to the men and women who are already finding it difficult to comprehend and implement all of the current safety requirements.

AGC does not mean to suggest that all provisions of the bill run in the wrong direction. In fact, there are several concepts that AGC could support. AGC agrees that OSHA needs to have a rational enforcement strategy. AGC agrees that the agency needs to improve the training and qualifications of the agency personnel who are assigned to inspect construction jobsites. In fact, the many safety professionals who form the AGC safety network would be pleased to work with OSHA on these and other issues.

AGC would be similarly pleased to discuss other safety and health issues that require attention. Some of these issues include:

—Employee accountability;
—Practical safety strategies;

—Drug testing;
—OSHA jurisdiction over public employers;
—Positive incentives for jobsite safety;
—Engineering controls;
—Repeat violations; and
—OSHA's use of internal directives to modify federal requirements.

As I now turn to the specific provisions of the proposed legislation, let me emphasize that AGC hopes and intends to make a positive contribution to the legislative debate over construction safety and health.

SECTION-BY-SECTION COMMENTS ON S. 930

Section 3: Definitions

Section 3 of S. 930 redefines the term "employer" to include "a self-employed contractor in the construction industry." Section 3 similarly redefines the term "employee." AGC believes these changes could cause great confusion.

AGC believes that Congress should amend the Occupational Safety and Health Act to hold employees responsible for their own misconduct, but does not believe that these changes are designed or intended to serve that purpose. They would permit OSHA to cite only a limited number of construction workers for taking unsafe actions.

The proposed changes would primarily serve to blur the well-recognized distinction between an "employee" and an "independent contractor." This distinction is fundamental to much of the contract law that serves the construction industry, and to several of the most important interpretations of the National Labor Relations Act. The proposed changes would cast great doubt on just who would be responsible, in at least the first instance, for subcontractors' practices.

Section 4: Office of Construction, Safety, Health and Education

Section 4 of the bill creates an Office of Construction, Safety, Health and Education within OSHA. This new office would apparently assume all responsibility for safety and health in the construction industry. AGC's major concern is that this provision would create more bureaucratic problems than it would solve.

The new office's "mandatory criteria" for company programs and jobsite plans would straitjacket many construction contractors. The construction industry is a large and varied one, demanding great flexibility. AGC does not believe one set of "criteria" can possibly accommodate everything from nuclear power plants to sidewalks and parking lots.

Section 4 also provides that the new office will assume control of construction jobsites following many accidents, even to the point of assuming the responsibility for rescue operations. In this regard, section 4 is unrealistic. The U.S. Labor Department is not in a position to replace the fire and safety rescue workers throughout the United States. Even with a massive infusion of federal resources, OSHA would continue for many years to struggle with this new responsibility.

AGC also finds it ironic that section 4 would require the new office to create a "small business liaison." The fact is that small businesses dominate the construction industry. By its very nature, any office devoted to construction jobsite safety and health must be prepared to communicate with hundreds of thousands of small businesses.

AGC supports efforts to improve the quality of the construction safety and health information available to construction employers. AGC also supports efforts to increase the awareness of construction safety and health issues. In fact, AGC supports the Office of Construction, Maritime and Health Engineering Support that OSHA has already created. To its great credit, this new office has already done much to improve communication between OSHA and the construction industry.

AGC cannot, however, support section 4. The unique characteristics of the construction industry justify an entirely separate set of OSHA standards for this industry, but not this kind of entirely separate enforcement structure.

Section 5: Inspections, Investigations, Reporting and Recordkeeping

AGC agrees that OSHA needs to establish rational priorities. AGC doubts, however, that section 5 can meet that need. OSHA cannot, at the same time, target: (1) worksites with a high potential for fatalities or serious injuries, (2) employers cited for violating what may be no more than minor recordkeeping requirements, and (3) construction projects with higher than average frequency for severity rates. These three criteria will not always point in the same direction.

AGC invites Congress to work with the construction industry to determine precisely what kind of enforcement strategy would have the greatest positive impact on construction safety and health. AGC also calls for more discussions of positive incentives for safe and healthy construction jobsites. Contractors with effective safety and health programs should be recognized.

Section 5 of the bill also creates several new recordkeeping and reporting requirements. All are cause for great concern. Contractors would find it extremely burdensome to maintain safety records at each separate construction jobsite. Contractors would often find it difficult to distinguish incidents that section 5 covers from incidents that it does not. Contractors would often find it impossible to determine who "could have been" killed or injured by a jobsite incident. Contractors find that the first 24 hours after a serious incident are too important to devote to reports on often irrelevant details. It violates all sense of fairness and due process to direct OSHA to make unilateral public statements on serious incidents "as soon as practicable."

OSHA could not possibly process all of the required notices of the "commencement of construction work on a construction project." The agency would literally drown in a sea of paper. Beyond that, the agency has no legitimate interest in the estimated cost of the labor or material on a particular construction project.

The requirement for reports at the completion of each construction project is similarly misguided, and would serve no discernible safety purpose.

Once again, it is important to make jobsite safety easy for construction employers to achieve. Extensive recordkeeping and reporting requirements tend to draw any attention away from tangible efforts to implement sound safety programs.

Section 6: Construction Safety and Health Programs

AGC agrees that construction contractors should have written safety and health programs, but once again, AGC does not believe that one rigid program will fit all contractors or their projects. Any effort to place all construction projects and all construction operations into a single mold is certain to fail.

Similarly, AGC agrees that general safety and health training, including construction jobsite instruction, is useful and effective. AGC has found, however, that redundant training tends to diminish the interest paid to safety and health issues. Requiring construction employees to receive precisely the same training at least every twelve months would be counterproductive.

In this regard, AGC should also point out that OSHA has already determined that it must take a second look at the value of the material safety data sheets (MSDS) that its hazard communication standard now requires contractors to maintain on each jobsite. AGC has long questioned whether these kinds of highly technical documents are an effective means of communicating safety information to employees.

The requirement for an evaluation and analysis of any "perceived hazardous condition" would primarily serve to limit the construction contractor's control over the construction process, to the detriment of everyone involved. This statutory dispersion of safety control and responsibility could actually undercut efforts to mandate safe and healthy jobsites. In addition, this requirement lends itself to abuse. Nothing in section 5 of the bill would discourage any employee or any employee representative from demanding a safety evaluation and analysis for entirely unrelated reasons.

Finally, AGC finds it difficult, if not impossible, to believe that any individual would accept the great risk of liability for a safety evaluation or analysis that, if flawed, could result in serious bodily injury or even death. Construction employers would be extremely hard pressed to find individuals willing to serve in the capacity that the bill contemplates.

Section 7: Onsite Construction Safety and Health Plans

Section 7 is much like section 5, in that it elevates form over substance, and misapprehends the impact that additional paperwork can have on jobsite safety. This section requires a construction process plan, a hazard analysis, education and training, the employment of a "construction safety specialist," and other administrative measures. All of these requirements would apply to all construction projects, however small or safe. These many requirements would literally apply to the construction of a new sidewalk in a residential neighborhood.

Section 7 is also an intrusion on management prerogatives. It would require employers not only to retain "construction safety specialists," but also to delegate major responsibilities to these individuals, up to and including the responsibility for halting all work on a project.

Section 8: Construction Safety Specialist

By requiring construction employers to hire construction safety specialists with highly specific qualifications, section 8 makes no allowance for the size of a particular construction project. It also deprives construction employers of their fundamental right to decide how to assign responsibility for jobsite safety and health.

Section 9: Construction Safety and Health Academy

AGC believes that there is great merit in the suggestion that OSHA needs to improve its understanding of the construction industry. AGC also agrees that there is room for much improvement in the training of OSHA's compliance officers. AGC's only concern is that the proposed academy may go beyond what is needed.

In any event, the proposed institution should work closely with the construction industry to ensure that its training reflects the real problems that contractors and OSHA inspectors encounter on the jobsite.

Section 11: Penalties

AGC believes that it is inappropriate to seek to impose criminal penalties on the construction industry before OSHA has demonstrated that educational and training efforts cannot improve construction jobsite safety and health. Working with the construction industry, OSHA should first seek to prevent injuries and illnesses.

AGC also believes the proposed definition of recklessness is far too vague to provide construction contractors with meaningful guidance.

Section 12: Advisory Committee on Construction Safety and Health

AGC continues to support the Advisory Committee on Construction Safety and Health, but opposes the proposal to transform this committee into a freestanding agency, with the power to "retain experts and consultants, employ secretarial and clerical personnel, and purchase office equipment and research material as may be necessary. . . ."

AGC believes that the Advisory Committee most usefully serves as a conduit for the flow of information from the field into OSHA. AGC therefore suggests that the members of this committee should be construction employers, construction workers and others who spend most of their time on construction jobsites.

AGC RECOMMENDATIONS FOR SAFETY AND HEALTH LEGISLATION

AGC cannot support S. 930 in its current form, but does believe that several safety and health issues merit serious debate. Following is a brief summary of several of these issues:

Employee Accountability

It is unfortunate that the employee accountability concept is entirely missing from S. 930. Studies of safety and health data have found that unsafe actions account for a majority of jobsite accidents.

E.I. Du Font Nemours & Company has compiled one of the best safety records in the United States. Its research found that 90 percent of all workplace injuries were the result of unsafe actions.

Other studies in this area include:

—A Bureau of Labor Statistics (BLS) study indicating that nearly 70 percent of all chemical burns are classified as injuries due to employee error.

—A study of the Bonneville Dam project, finding that unsafe actions caused seven times the number of accidents than those caused by unsafe conditions.

—Statistics developed by the Construction Safety Association of Ontario, Canada indicating that 68 percent of all work injuries involve unsafe employee behavior.

Ontario, Canada provides a good example of how to legislate employee accountability. Ontario's 1980 Safety Act includes the following provisions:

(1) A worker shall,

work in compliance with the provisions of this Act and the regulations;

use or wear the equipment, protective devices or clothing that his employer requires to be used or worn;

report to his employer or supervisor any contravention of this Act or the regulations or the existence of any hazard of which he knows; and

where so prescribed, have, at the expense of the employer, such medical examinations, tests or x-rays, at such times and at such place or places as prescribed.

(2) No Worker shall,

remove or make ineffective any protective device required by the regulations or by his employer, without providing an adequate temporary protective device, and when the need for removing or making ineffective the protective device has ceased, the protective device shall be replaced immediately;

use or operate any equipment, machine, device or thing or work in a manner that may endanger himself or any other worker; or

be engaged in any prank contest, feat of strength, unnecessary running, or rough and boisterous conduct. [1978, c. 33, 17]

Another provision of the Ontario Act provides for contractor and employee fines. Ontario has traced the impact of its program, and reports a significant improvement in jobsite safety.

AGC believes that it is time to recognize that employees share at least some of the responsibility for jobsite safety and health. OSHA should be involved in the effort to encourage workers to work safely. Just as employers must accept the responsibility to provide safe working conditions so too must employees accept the responsibility to work in a safe manner.

Practical Safety Strategies

AGC believes OSHA should make a far greater effort to develop and publicize practical strategies that construction contractors can tailor to fit their operations. OSHA would have a more positive and profound impact on jobsite safety and health if it devoted more of its resources to training, education, and the promotion of practical, cost-effective safety strategies.

Drug Testing

Drugs are a serious problem that OSHA must address. Recent studies indicate that as many as 23 percent of all U.S. workers use drugs on the job, and drug use may account for over half of all workplace accidents.

Drug testing programs are the best method to ensure that the majority of law abiding employees are not injured by the minority of drug users. AGC urges Congress to pass legislation that will preempt state and local efforts to restrict drug testing. In the construction industry, employers need the right to implement drug testing programs in order to achieve and maintain safe and healthy jobsites.

Public Employees

Federal safety legislation should apply to all construction workers, including those working for state and local governments. AGC believes the exemption of state and municipal government employers from OSHA's jurisdiction is unjustified.

Positive Incentives for Jobsite Safety

AGC believes OSHA should recognize and encourage good safety programs. Specifically, OSHA should exempt contractors with a lost workday case rate below the national average from routine inspections. Such practical recognition would allow OSHA to concentrate its resources where they will have the greatest impact.

Engineering Controls

OSHA should give construction employers far greater freedom to use personal protective equipment and administrative practices to reduce jobsite hazards. The agency's current emphasis on engineering controls often makes it more difficult to achieve safe and healthy jobsites. The constantly changing nature of construction work frequently makes engineering controls impractical. For example, by the time ventilation equipment is in place to control emissions from a welding operation, the work is finished, the emissions dispersed, and a new phase of work started.

Repeat Violations

AGC calls on Congress to redefine "repeat" violations to apply to second or subsequent infractions of the same provision on the same jobsite.

OSHA Internal Directives

OSHA has frequently used internal directives to modify the substantive requirements of its standards. In lieu of rulemaking, OSHA has issued directives on fall protection, suspended personnel platforms, general safety and health, safety training, recordkeeping and medical attention.

When such directives modify the substance of a standard, they amount to rulemaking without notice or public comment. Employers are held accountable for compliance with the directives, and cited for their violations.

Congress should amend the Occupational Safety and Health Act to prohibit directives which tend to frustrate well established public rulemaking procedures.

CONCLUSION

AGC greatly appreciates this opportunity to testify on S. 930, the "Construction, Safety, Health and Education Improvement Act of 1989." AGC hopes that its suggestions and recommendations will encourage the Committee to refocus the legislative debate over construction jobsite safety and health back to issues which materially impact jobsite safety. It is essential that employee accountability, drugs in the workplace, practical safety strategies and positive incentives, be a major part of the discussion.

Senator DODD. Thank you, Thad, for coming by. We appreciate your interest.

Senator COCHRAN. Thank you, Mr. Chairman.

Senator DODD. Ed Travis, we are happy to welcome you.

Mr. TRAVIS. Thank you, Mr. Chairman.

My name is Ed Travis, and I am President of a company called L.E. Travis Sons in San Antonio, TX. I am a fourth-generation painting, sandblasting and wall-covering contractor.

It is a pleasure for me to testify before you today on behalf of the Associated Specialty Contractors.

The Associated Specialty Contractors is a coalition of eight national associations whose combined membership totals about 25,000 firms. On a typical construction job site, the contractors represented by these groups may do up to 80 percent of the actual work on the job site.

The construction industry has undergone many changes over the past 100 years. My business today is nothing like the contracting business that was started in 1886 by my great-grandfather who was employed by the railroads to go through the countryside, painting bridges, depots and section houses. Now, four generations later, myself and my brothers work on such projects as hotels, universities, and even our own Texas State Capitol.

Over the past 100 years, the construction industry has also changed, and workplace safety has improved as a result of better employee training, improved protective equipment, and the Occupational Safety and Health Administration.

Despite massive improvements in workplace safety, the construction industry is acutely aware that there continues to be room for improvement. Senate Bill 930 is one remedy that has been offered to help improve workplace safety.

As proposed, Senate Bill 930 would substantially increase the amount of OSHA paperwork that subcontractors would have to complete. Many of these proposed paperwork provisions would duplicate requirements already found in other OSHA standards, including the OSHA Hazard Communication Standard Program.

S. 930 would also place the responsibility for construction safety with a certified construction safety specialist. No professional that we know of is adequately trained as a workplace safety professional, including the construction safety manager, who would require the assistance of professionals from a variety of engineering disciplines to achieve the required tasks being proposed for the construction safety specialist.

We believe OSHA should differentiate between safety responsibilities for the structural aspects of construction and for compliance with OSHA regulations and safe work practices.

Even if you could find and train specialists to determine the safety of the structural aspects of all projects, employers should remain responsible for their own compliance with OSHA.

One of the major problems with S. 930 lies in how it defines "construction contractor", "construction work", and "construction work site" and this relationship to the hiring of construction safety specialists.

For example, painters are frequently one of the last trades on a construction project, and sometimes the only individuals working on the site. Does this mean that if I have one or two painters finishing up a project with no general contractor present that I have to hire a construction safety specialist until all of my employees leave the job site?

S. 930 does not clarify how many employees on a site require the presence of a construction safety specialist, or if residential property is exempt, or if the responsibility for requiring the construction safety specialist rests with the general contractor exclusively, or with each and every employer on the job site.

S. 930 would also require the construction safety specialist to develop a project-specific onsite construction safety and health plan. A painting specialty subcontractor can ensure that the scaffolding is built properly, that his employee is wearing a hard hat, a respirator, a safety harness. The construction safety specialist can watch this painter work and make the assessment that it is a safe work environment. Then a carpenter or some other workman above the painter could call down to the painter, temporarily distracting him and throwing him off-balance. As a result of his loss of balance, the painter could inadvertently knock some of his equipment off the scaffold or some such occurrence, onto the shoulder of a passerby below.

The moral of the story is that even when everyone on the work site does exactly what they are supposed to do in accordance with a well-researched and documented plan, accidents unfortunately still can and will occur.

S. 930 dramatically increases the criminal penalties presently allowed under the Occupational Safety and Health.

In painting and decorating, the use of safety harnesses and belts are necessary to protect painters from falling off scaffolds and swinging stages. Painting contractors like myself who provide these harnesses and belts to employees and train them in the proper way to use them and have a foreman stand around and watch their work as much as possible still cannot be sure that every painter will be using these safety devices all the time and in the proper manner. There are workmen who absolutely do not want to wear these protection harnesses and will not wear them, or wear them improperly any chance they get. They feel that these harnesses can constrain their movements. But if one of these painters willfully disregards using these safety devices which they should be using and is injured, should I or a construction employer serve time in jail for this occurrence?

While contractors have traditionally been responsible for their employees' safety and ultimately should be responsible for providing the employee with a safe workplace, employees must share in this responsibility, especially when so many accidents are being linked to drug and alcohol use and abuse.

If making the construction workplace safe is ultimately the goal of this hearing or any legislation that may be developed in the future, then it is imperative for Congress to recognize that the lack of safety training and education of both employers and employees is perhaps the greatest failure of the present OSHA structure.

Associated Specialty Contractors feels that the primary focus of any OSHA reform should be toward increasing the agency's educational and training activities. The most effective way to assure a safe workplace is through compliance education of the contractors and their employees. In addition to changing its emphasis from enforcement to education and training, OSHA needs to develop training programs for all present standards and plan to provide training for all future regulations. OSHA must also take the plunge and make employees accountable for compliance with standards, regulations and safe work practices.

If I have a painter who refuses to follow safe work practices, and I fire him, and he simply goes down the street to work for one of my competitors, his safety liability goes along with him.

Unfortunately, there exists an adversarial relationship between OSHA and the construction industry, and in my opinion it is unhealthy. But ASC believes that this relationship can be improved if OSHA will hire more qualified and properly-trained construction inspectors, provide a resource to train and educate contractors and their employees about workplace safety, and hold all members of the construction team responsible for safety, including construction employees, you will see vast improvements in the construction workplace.

Thank you very much.

[The prepared statement of Mr. Travis follows:]

Prepared Statement of Ed Travis

Good morning, my name is Ed Travis, President of L.E. Travis and Sons Inc., a painting, sandblasting and wallcovering specialty subcontracting firm located in San Antonio, TX. It is a pleasure to be able to testify before you today on behalf of the Associated Specialty Contractors (ASC). Like myself, the members of ASC are very interested in S. 930 and its approach to improving construction workplace safety.

The Associated Specialty Contractors is a coalition of eight national associations of construction specialty contractors whose combined membership totals about 25,000 firms. The segments of the industry represented by ASC affiliates are comprised of about 165,000 business establishments with annual sales of about $63 billion and 1,300,000 employees. On a jobsite the contractors represented by these groups do up to 80 percent of the total work.

The member associations of ASC include the Mason Contractors Association of America (MCA), the Mechanical Contractors Association of America (MCAA), the National Association of Plumbing-Heating-Cooling Contractors (NAPHCC), the National Electrical Contractors Association (NECA), the National Roofing Contractors Association (NRCA), the Painting and Decorating Contractors of America (PDCA), of which I am a member, and the Sheet Metal and Air Conditioning Contractors' National Association (SMACNA).

A CHANGING INDUSTRY

The construction industry in America has undergone a multitude of changes over the past 100 years. My business today is nothing like the contracting business started in 1885 by my great grandfather, James A. Travis. He started as a contractor when he was employed by the railroads to go through the countryside painting bridges, depots, and section houses. Now four generations later, this family run business paints luxury hotels, universities and the Texas State Capital. Also unlike my father who was a union contractor, in 1984 my company became a merit shop business.

Just as my business has undergone a myriad of changes over the past 100 years, the construction industry has also changed. Although construction employment is still associated with hard work and exposure to the ever changing weather elements, being a construction worker no longer assumes that you will face a serious injury or be killed on the job. Today workplace safety has improved as the result of better employee training, improved protective equipment, and the Occupational Safety and Health Administration (OSHA). Today's jobsite is a safer, better place in which to work as compared to those jobsites being run by my great grandfather, grandfather, and even father.

But despite massive improvements in workplace safety, the construction industry is acutely aware that there continues to be room for improvement. S. 930, the proposed amendments to the Occupational Safety and Health Act of 1970, which has been introduced by Senator Christopher Dodd of Connecticut is one remedy that has been offered to help improve workplace safety. This legislation evolved in response to the L'Ambiance Plaza building collapse in Bridgeport, Connecticut in 1987.

PROPOSED REMEDIES—NEW CONSTRUCTION OFFICE IN OSHA

S. 930 would call for the codification of the current Office of Construction, Maritime and Health Engineering Support. However, the bill would substantially change and broaden the functions of this office. ASC believes that there is a need within OSHA to develop specialized oversight for construction contractors, and to hire additional OSHA inspectors trained exclusively in construction safety. There is also a need within OSHA for technical experts to assist contractors and their employees with specific technical inquiries and educational programs.

ASC questions the appropriateness of developing mandatory criteria for worker health and safety through the regulatory process as proposed in this bill.

PAPERWORK, PAPERWORK

S. 930 would also substantially increase the amount of OSHA paperwork that subcontractors would have to complete. In an effort to obtain data concerning high-hazard construction operations, and to identify contractors with poor safety practices, the majority of small, safe practicing contractors are going to have to be unfairly burdened with recordkeeping requirements. S. 930 would require contractors not only to provide OSHA written information at the beginning of a project, and with at least one detailed safety report per project, but would also require contractors to keep records of all incidents, accidents, injuries and fatalities, regardless of the scope of these events. And failure to comply would result in steep civil penalties.

The legislation would also require all contractors to have a written safety and health program. This program calls for everything from the instruction of employees in recognizing and avoiding unsafe and unhealthy conditions, to providing for regular tool box talks.

Many of these paperwork provisions are either found in other OSHA standards or are common construction industry practice. Some are also duplicative of the already onerous provisions of the OSHA Hazard Communication Standard. Probably, no single construction industry specialty is as impacted by the HCS as the painting and decorating industry. Many painting subcontractors have as many as 10,000 material safety data sheets to cover the various different color paints and products used in our industry. Training employees on MSDSs, and collecting and maintaining this material has been a very time consuming and expensive proposition for most small contractors. Now to require these same small contractors to write a new safety and health program that duplicates a significant portion of the HSC just does not make sense. While the HCS does stress substance exposure, and S. 930 addresses worksite tasks and practices, ASC questions the value an additional written program will have.

CONSTRUCTION SAFETY SPECIALISTS—THE SEARCH FOR A FEW GOOD MEN AND WOMEN

S. 930 would also place the responsibility for construction safety with a certified Construction Safety Specialist (CSS). This CSS, after 40 hours of study in construction safety, would essentially have the responsibility for monitoring and supervising the safety programs and practices of all contractors on the construction worksite.

While ASC agrees that there is probably a need for someone on a construction worksite to have the ultimate responsibility for worker safety, we are not convinced that the Construction Safety Specialist has the necessary skills to fulfill this responsibility or assume the tremendous liability implied by the proposed bill.

It is our opinion that the skills required to determine the structural integrity of a worksite may be very different from those required to oversee worker safety. No professional that we know of is adequately trained as a workplace safety professional including the "Construction Safety Manager." Even a "Construction Safety Manager" would require the assistance of professionals from a variety of engineering disciplines to achieve the required tasks being proposed for the CSS. In other words, even this individual would be unable to assume complete responsibility for the entire safety of the worksite.

S. 930 simply stated, places too much responsibility and liability on an individual who most likely will not have the necessary expertise required to ensure a safe workplace. In addition, at present, there would be a lack of qualified individuals to carry out the duties of the CSS.

The bill also fails to clarify whether or not all specialty subcontractors would be required to hire Construction Safety Specialists. On one hand, many small contractors, or contractors working on small projects would be unable to hire a CSS for each jobsite due to increased costs. On the other hand, while most subcontractors make their contract with the general contractor, these subcontractors want the responsibility for overseeing their own employees' workplace safety.

OSHA should differentiate between safety responsibilities for the structural aspects of construction and for compliance with OSHA regulations and safe work practices. Even if you could find and train specialists to determine the safety of the structural aspects of all projects, employers should remain responsible for their own compliance with OSHA.

JUST WHAT IS RESPONSIBILITY AS AN EMPLOYER?

One of the major problems with S. 930 lies in how it defines "construction contractor", "construction work", and "construction worksite" and this relationship to the hiring of Construction Safety Specialists. For example, painters are frequently one of the last trades on a construction project, and sometimes are the only individuals working on the site.

Does this mean that if I have one or two painters finishing up a project, with no general contractor present, that I have to hire a CSS until all of my employees leave the site?

If I send several painters to work on a homeowner's remodeling project and I contract directly with the homeowner, does that make me responsible for bringing a CSS into the homeowner's kitchen?

S. 930 does not clarify how many employees on a site require the presence of a CSS, or if residential property is exempt, or if the responsibility for acquiring the CSS rests with the general contractor exclusively, or with each and every employer. In other words, S. 930 does not take into account the true character of the construction industry. If all of the above examples would require the presence of a CSS, I assure you that not only would this requirement be next to impossible to achieve, but also probably more significantly, it would lead to substantially increased construction costs.

ONSITE PLANS—INHERENT FLAWS

S. 930 would also require the CSS to develop a project specific onsite construction safety and health plan which describes all construction processes, provides a hazard analysis, and ultimately must protect workers against the hazards anticipated on the project analysis. Despite this attention to detail, and level of responsibility placed on the C55, such a plan does not guarantee that there will not be any safety incidents on the worksite. Construction injuries can occur even when the project design is correct, the equipment used is excellent, and the workmanship is of the highest caliber.

A painting specialty subcontractor can ensure that the scaffolding is built properly, and that his employee is wearing a helmet, respirator, and safety harness. The CSS can watch this painter at work and make the assessment that it is a safe work environment. Then a carpenter working above the painter could call down to the painter, temporarily distracting him and throwing him off balance. As a result of his loss of balance the painter could inadvertently knock some of his equipment off of the scaffold and onto the shoulder of a passerby below. The moral of the story is that even when everyone on the worksite does exactly what they are supposed to do in accordance with a well researched and documented plan, accidents still can, and will always occur.

INCREASED CRIMINAL PENALTIES—DO NOT PASS GO, DIRECTLY TO JAIL

S. 930 dramatically increases the criminal penalties presently allowed under the Occupational Safety and Health Act. A first-time offender of a willful violation resulting in a serious injury could spend up to five years in jail; if a death occurs, a contractor could be sentenced to ten years imprisonment.

The bill defines a willful violation as occurring when an employer either shows indifference to human life by consciously disregarding a substantial and unjustifiable risk of "such a nature and degree that disregarding it constitutes a gross deviation from the standard of conduct that a reasonable person would observe in the situation."

I have grown up in the contracting business, and can honestly say that I personally do not know of any contractors who are so indifferent to human life that they want to place their employees in a position where they could get killed. It certainly is not in the contractor's interest to lose a good employee, much less to be sued for his injury or death.

But I do know of contractors who are short of workers, and are under pressure to meet a deadline long since overdue. These contractors may push their employees to speed up the process and, in turn, some of these employees may respond to a request to speeding up the process by not wanting to take the time to put on all required or necessary safety equipment. But if speeding up the process makes someone lazy or careless, does an accident that results from this laziness or carelessness warrant that a contractor go to jail for 10 years. Somehow this just does not seem fair.

In painting and decorating, the use of safety harnesses and belts are necessary to protect painters from falling off scaffolds. Painting contractors like myself who provide these harnesses and belts to employees, and train them in the proper way to use them, and have a foreman stand around and watch their work as much as possible, still can't be sure that every painter will be using these safety devices all the time and in the proper manner. There are painters who absolutely do not want to wear these protective harnesses and will not wear them, or wear them improperly any chance they get. They feel that these harnesses constrain their movement. But if one of these painters willfully disregards using these safety devices and cheats himself out of safety, and as a result is injured, should I be cheated out of 10 years of my life by serving a jail sentence for his willful negligence? I think not.

The essence of this argument is quite simple all people on a construction worksite have a responsibility for safety-owners, general contractors, subcontractors, and workers. To eliminate construction workers from having any responsibility or liability for their own safety practices, is like leaving the roof off of a building; it is failing to complete the project. While contractors have traditionally been responsible for their employees' safety, and ultimately should be responsible for providing the employee with a safe workplace, employees must share in this responsibility, especially when so many accidents are being linked to drug and alcohol use and abuse.

When an employee contributes to a safety incident through the use of drugs and alcohol, or failure to use proper personal protective equipment, or other safety practices for which he or she has been trained, then the employer alone should not be held accountable and risk a criminal penalty.

IF YOU WANT A SAFE WORKPLACE—HERE IS WHAT YOU NEED TO DO

If making the construction workplace safe is ultimately the goal of this hearing or any legislation that may be developed in the future, then it is imperative for Congress to recognize the realities of how the construction workplace really works.

EMPHASIS ON TRAINING AND EDUCATION, NOT ENFORCEMENT

The lack of safety training and education, of both employers and employees, is perhaps the greatest failure of the present OSHA structure. The punitive and adversarial relationship between OSHA and contractors works against the objective of providing a safe workplace for the nation's employees. ASC feels the primary focus of any OSHA reform should be toward increasing the agency's educational and training activities. The most effective way to assure a safe workplace is through compliance education of the contractors and their employees. If OSHA were to provide this training, the agency would have greater success achieving its objective. In addition to changing its emphasis from enforcement to education and training, OSHA needs to develop training programs for all present standards and plan to provide training for all future regulations.

The lack of properly and specially trained OSHA inspectors is also another fundamental problem. Putting in place the funding mechanism to hire more specially trained construction industry OSHA inspectors would be a very wise and productive use of taxpayers' money.

PREPARE FOR A CHANGING WORKFORCE

The construction industry is acutely aware of the future worker shortages predicted for the construction industry. Already we are beginning to see the industry composition change from a predominately white male workforce, to one composed of increasing numbers of minorities and women. Of particular concern is the influx of Hispanic and Mexican immigrants, lacking basic language skills. Oftentimes it is difficult to communicate safety messages to individuals who can not speak English. In South Texas this has already become a problem, and efforts are being made to employ bi-lingual foremen so that they can communicate to all employees. I can see a time in the not too distant future when all jobsite safety signs will have to be bilingual.

The construction industry is already beginning to prepare for the uncertain and changing workforce, and recognizes that as an industry in both the union and merit shop sectors, greater efforts must be made to seek out qualified and interested employees and to train and educate these employees not only on construction skills and trades but in remedial math and English. OSHA also needs to recognize and plan for the future of the construction workforce and be prepared with special training programs designed specifically with the Spanish speaking population in mind.

EMPLOYEES SHARE RESPONSIBILITY FOR WORKPLACE SAFETY

OSHA must also take the plunge and make employees accountable for compliance with standards, regulations and safe work practices. OSHA should cite and fine workers for serious, willful or repeat violations of OSHA standards. If I have a painter who refuses to follow safe work practices and I fire him, he simply goes down the street and becomes another painting subcontractor's safety liability. This practice should not continue.

EXEMPTIONS FOR GOOD PERFORMERS

Also for those contractors like myself, who have established safety and health programs and safety records, there should be exemptions from inspections. Inspections should be concentrated on the few employers who are chronically non-complying, not those companies like mine which have survived for over 100 years because we care about our employees and work hard to maintain a safe workplace.

CONCLUSION

Believe me when I tell you that the construction industry sincerely wants to avoid incidents like the collapse of the L'Ambiance Plaza. We do not want to lose or injure our good employees, and we do not want to be cited or fined by OSHA. So if you beef up your resources within OSHA to get more quality and properly trained construction inspectors, provide a resource to train and educate contractors and their employees about workplace safety, and hold all members of the construction team responsible for safety, including construction employees, you will see improvements in workplace safety.

If you still are not convinced that we are moving in the right direction, think back to my great grandfather who went to work for the western railroads over 100 years ago. Despite all of the bureaucratic hassles impacting my business versus those experienced by my great grandfather, today is still the best time in the history of this nation to be a painting contractor. Despite all of the perceived health and safety shortcomings associated with the construction worksite, there is no more fulfilling or more enjoyable way to make a living than as a specialty construction tradesman or woman.

On behalf of the Associated Specialty Contractors we thank you for having this opportunity to share with you our views on S. 930 and construction industry OSHA reform.

Senator Dodd. Thank you very much for your testimony, all three of you. I appreciate your presence here.

I do have some questions for you, and I'll begin with you, Mr. Paradis. I noted in your testimony that you support many of the provisions contained in S.930, such as the requirement for a safety and health program, safety specialist and the like. Is that because most of your member companies are doing these things on their projects already?

Mr. Paradis. I think it goes back to the basic thinking of NCA member companies, that first of all, we tend to feel that the administrative changes are probably more important, more germane, more what we should be talking about as opposed to legislation. I think we have to recognize that some legislation is necessary. I think we should feel as a group that we should limit that legislation whenever we can improve on it as possible.

But yes, the NCA member companies do commit the resources to provide very sophisticated programs, and I think the results are there. The performance of NCA member companies is outstanding and has been for many years.

Senator DODD. Well, one of the things that occurred to me—and I have no idea of the size of Mr. Travis' fourth-generation family business, and I congratulate you on that. My great-grandfather came to this country as a contractor, a stonemason. In fact, in Norwich, Connecticut, it is hard to find a building with a foundation that was not built by my great-grandfather. Then my grandfather carried on the business. And in fact, in one little catechism class in Norwich one day, students were asked who built the world, and one little girl shot her hand up and she said, "Tom Dodd and his horses." So there is a long history of being involved in it, and I was talking about it this morning on the way down to work with some friends, the difficulties years ago without bonding and a variety of other things, that if you were a small contractor you got put out of business pretty quickly there were so small protections for you, and if you didn't get paid, given the margins of profits and so forth.

I don't know how big your operation is, but it occurred to me that the support of your association is primarily larger operations. And the concern would be I suspect that some of the smaller operators get worried about some of the things we are talking about here and the costs associated with it. Is that a factor? Are in fact most of your members larger employers?

Mr. PARADIS. Most of them are. Within our membership, we do have some smaller employers—and you can categorize what is a small employer—but not all of our employers work three, four, five, ten million man-hours a year.

But I think you have to get to the bottom line as to how small do you get to where you must comply with the basic program. I think there are very basic programs that can be put together that are available for all contractors that say, okay, if you are a construction contractor in this country this is where you start. I think that can be done very easily with a minimum program.

Senator DODD. Let me ask you just out of curiosity, of the three organizations here, quickly, did all three support the creation of OSHA in 1970, or was there some opposition expressed at that time as well; do you know the answer to that?

Mr. PARADIS. We did.

Mr. FORDICE. I refuse to testify, Senator, on the grounds that it might incriminate the Association. [Laughter.]

I don't really know the history of that. We have had considerable problems with the act since, as have most employers, and OSHA has undergone some revolution and has solved some of those problems. Certainly we have had our problems; I think all employers have.

Senator DODD. Ed, do you know?

Mr. TRAVIS. I don't know the history of that as far as our organization is concerned.

Senator DODD. I don't disagree with your notion that education and training can play a significant role in all of this, but I suspect that many while maybe opposing initially the legislation would not argue with the idea that in and of itself, it is probably not going to deal with the situation with complete effectiveness. But it is hard to say exactly what the rationale may be.

Of course, many people support the concept of including the cost of safety in the construction process by requiring the contractor to factor into the bid documents of the cost of safety equipment. If that were done across the board, you would eliminate some of the concerns, I presume, because everyone would have to meet those same kinds of requirements.

What is your reaction, all three of you, to that kind of a requirement?

Mr. FORDICE. Well, Senator, we do a lot of work for Federal agencies such as the Corps of Engineers, so there is no question whatsoever about what personal protective equipment you are going to provide to your employees. It is all well-spelled out by contract. The answer to a lot of things in construction is that definition within the contract of what you are going to do.

Since the inception of the OSHA Act, we are all supposed to know what personal protective equipment we are supposed to provide and enforce the wearing of, and I suppose the universality that comes from the law that requires that is helpful. Any time you can level all of your competitors and have them be just as conscientious and do everything that you do is certainly an aid.

Senator DODD. That's what occurred to me. It would seem to me that, taking your company, which has had an incredible record over the years, and Ed, your business and the related firms—I suspect what is frustrating is that you see yourselves doing certain things, and someone comes in and maybe underbids you on a job, and you know that they are not doing certain things in an area, and when a problem arises, then your industry by implication suffers because of the actions of some, and part of the reason they have underbid you is because they have not paid attention to some of those costs.

Mr. TRAVIS. Senator, can I make a comment.

Senator DODD. Sure, I'd like you to.

Mr. TRAVIS. Unfortunately, a construction job site is not a static workplace. It is continually changing. It changes during the day, and it changes from day to day. You can be perfectly in compliance and perfectly safe one day, and the next day you may not be—the next hour you may not be.

Two weeks ago, I had an OSHA inspection on one of my job sites. The inspector was there for 3 days, not only looking at my particular craft but looking at all the other contractors working on this particular job site. I did not escape that inspection without a penalty. I was cited for a hazard communication infraction. But the rest of my job site was given a clean bill of health.

Last Thursday, I had a serious accident on my work site in which a scaffold toppled over on top of one of my painters, who is now in the hospital with a serious back injury.

New construction of commercial projects is done primarily by subcontractors. Subcontractors by their nature are for the most part historically relatively small, family-owned concerns, and they don't have large office staffs; they cannot afford that. They do not have the sophistication of the large general contractors. Therefore these requirements that are placed on the small contractors become almost to the point where they feel like they are drowning, and that there is no way they can possibly comply with all the restrictions that are placed upon them.

Fortunately, our firm is very active in our particular trade association, so we have become conscious of safety, of hazard communication, of hazardous waste, and the other programs that are now in place.

Unfortunately, not all subcontractors are active in their individual trade associations, and if they are not active in their individual trade associations, many times they are ignorant about what the requirements are. Of course, OSHA does not have enough inspectors to make every job site in the United States on any kind of a regular basis. So there needs to be some emphasis in the OSHA program to promote educational aspects instead of making it an adversarial relationship where OSHA is feared, but rather OSHA works together with contractors in trying to build a safe workplace and work hand-in-hand to achieve that. If more emphasis could be placed on the educational aspects, both for contractors and for employees, I think that would go a long distance in making our workplace a safer place.

Senator DODD. I appreciate that comment. As I was listening to you, you seem to have made a better case than I have made this morning in the exact example you cited where you had the inspector there and obviously, aside from some communication infraction allegedly, everything else came out clean, and then a couple of days later you have a scaffolding go down, in that kind of a site where you've got so many different contractors involved, that having someone there ongoing all the time that comes out of the industry rather from OSHA—obviously, OSHA isn't going to have an inspector 24 hours a day or 8 hours a day or whatever it is on site—but to have someone there who was responsible for keeping an eye overall on the health and safety conditions of that site—again, your point is well-taken. A small, family-owned operator who comes in and sets up a scaffolding operation, you don't know—you are in business, presumably, you have had some references, they seem to be okay, they bid a good price on it, they've done a few other jobs, so you go with them—but you face the problem—you are not a scaffolding expert, presumably, although you may be because of the painting business, but someone else wasn't—to have someone there who would be able to go over and say, "That's not done right," or at least to be on top of that situation would seem to me to make a strong case for section 7 of the bill, at least—and again, I am assuming we're talking about a size, the number of different contractors around and so forth—for having someone on site like that where you do get a cooperative spirit.

Mr. TRAVIS. I really can't argue that one way or the other. I think the thing you have to keep in mind is that construction projects are of different size and different magnitude. You have construction projects that are $100 million, and you have construction projects that are $50,000, and you have construction projects that have 1,000 employees, and you have construction projects that have two. Where you draw the line—I don't know the answer to that.

Senator DODD. There is an exemption paragraph in the legislation—it is rather broadly worded. Again, I think some of the expenses and so forth, you may want to take that into consideration, and I am delighted to hear some recommendations maybe from the Association in that area as to how we might tighten that down and define things are clearly as possible. That could be a real positive and constructive help to us I think in trying to draft something here. So I think that point that you have raised is a very good one.

Do you want to comment on this, Kirk?

Mr. FORDICE. Senator, I wanted to elaborate a little on what Ed—first of all, I want to agree with him. Most of our people, although we represent general contractors, are small business as well and feel kind of overwhelmed by the increasing regulation in this area. But there is almost an impossibility of providing to all the construction sites in America an individual qualified in all these things, Senator, to be quite realistic about it. I don't see how that individual is every going to be created in enough quantity to cover anything like all the construction sites in America. Furthermore, we have got to talk a little bit about the liability.

The Iron Workers' representative sitting in this chair correctly stated that basically the contractor is responsible. When the agency was sitting up here, nobody seemed to want to be very forthcoming in assuming responsibilities for taking over a job site, like we were talking about earlier; nobody seemed to want that. Well, it rests on the contractor's shoulders now, and perhaps that's where it needs to stay—from a legal standpoint, from an insurance standpoint, the bond ramifications and so forth. And when an analogy is made to an air disaster where the government takes over and controls that site, you can't transfer that analogy to a construction work site after an accident. As Mr. Travis said, a construction work site is a constantly changing thing, and when a collapse or whatever occurs, that doesn't mean the whole thing is going to stop; there are other things ongoing. If you have a bridge cantilevered out over the Mississippi River, and a man falls off and dies, you'd better not shut it down. There is hazard to navigation and all kinds of other considerations. And who in the government is well-trained enough to come in and shut down a tremendous job because a fatality occurred?

Senator DODD. I hope you did not misinterpret. I'm not saying you automatically shut down a site because of fatality. But whether or not under certain circumstances you would have the right to shut that down—as the present law is, you basically do not no matter what the circumstances.

Mr. FORDICE. Well, I submit that the willingness to take over such responsibility was very gingerly approached.

Senator DODD. I agree with you. He was not overly anxious to jump all over it. I don't disagree with you. Obviously, if you've got one accident that occurs on a huge site, you are not going to shut down the whole operation. That would be ludicrous.

But also when you have, like we did, where an entire site caves in on you, you don't want to have to spend a month in court trying to figure out whether or not to shut the thing down, when you've got that kind of a cataclysmic event. And I presume you would not disagree with me on that example.

Mr. **Fordice.** I would not disagree that you might need to shut a site down. I think we might disagree on who would have the responsibility of doing that.

Senator **Dodd.** I don't disagree that you've got some thorny questions that you've got to resolve on that.

Mr. **Travis.** Senator, could I make one last comment.

Senator **Dodd.** Yes, certainly.

Mr. **Travis.** This is an argument where perhaps OSHA or someone should look into the redirecting of whatever resources they have—and I am not privy to that. But let me give you just a real brief example.

A friend of mine, a young contractor in San Antonio, TX, had an OSHA onsite inspection. He received a monetary fine for not having an MSDS sheet, Material Safety Data Sheet, under the hazard communication program, for a can of WD-sitting in his office trailer that he uses to keep his tools lubricated.

How much did it cost for that particular citation to be issued? I would much rather see OSHA spend those resources in a much more common sense approach for that job site inspector or whatever resources they have to be holding an educational class for either employers or for employees on the job site or however it needs to be worked out, rather than issuing citations for cans of WD-40, which probably everyone in this room has on their work bench at home to keep their tools lubricated.

So I would just hope that some common sense approach would be used in all these matters that deal with safety, and let's use all the resources that we have to their best use.

Senator **Dodd.** I don't disagree on that. I think what happens too often—I remember campaign spots that a colleague ran a few years ago, showing someone lugging a latrine on the back of a horse out West, and it was humorous—and very effective, I gather, as well—I think my colleague run that race with that spot. But the problem is too often we can get anecdotal about stuff—I feel that you can cite ridiculous—and not knowing any more about this one, I couldn't disagree with you at all. As you've described it to me, as someone who is a proud owner of a lot of cans of WD-40, I'm sitting here wondering about when I see it open on my sailboat what someone would think if I were cited by OSHA. But I think the danger when we do that sometimes is we get diverted from the general purpose that I hope all of us agree on, and that is to try and do everything possible to reduce the number of accidents.

Unfortunately what happens so often—and this isn't unique with construction workers or the construction industry—is that the statute books that line the libraries in this town are designed unfortunately not to deal with the overwhelming majority of people in this business in my view who do the right thing and really do work hard. Unfortunately, we are confronted over and over again with contractors and others who frankly, in the absence of this stuff—and you know them as well as I do—wouldn't do a damn thing out there. That is the tragedy of this thing, that we find that to be the case. Regrettably, good people, who would have done this without anyone asking them to do it because they happen to believe it makes sense for them economically, not to mention ethically or morally or whatever else, don't. So we get confronted with these dreadful situations we find ourselves in, to try and at least be reasonable, practical, not load up on people like yourself or others, burdensome, tiresome, costly layers of bureaucracy and regulation which make it impossible for you to function as a businessman and cause, I suspect in some cases, people to close the door and get out of the business. And certainly, I don't want you to sit here and think for one second that I would like to be associated with anything that contributes to that.

But at the same time, we all have to look at what we can do to put in place some reasonable laws in this country that will protect people who work in a hazardous industry—and obviously the accidental injury that occurs through no one's fault at all, we are not talking about here. We are talking about things that can be avoided, or at least steps can be taken to minimize those things from occurring.

This brings me to the substance of the question that you have raised, Kirk, the drug testing issue, which is a very popular subject matter in this town.

NIOSH indicates in their study—and they said fatal accidents, which may be the distinction here—that in their examination of fatal accidents, substance abuse did not seem to be as big a problem as even they had thought. Now, they said "fatal." And as I read their conclusions, my first reaction was, well, that's only the ones where people died; if you took all the injuries, you may end up with a different statistic. Am I correct in that concern?

Mr. Fordice. I don't know those statistics, Senator, but I do feel strongly that each and every employer ought to be, particularly in the case of an accident, not only a fatal, but ought to be able with complete impunity to test everybody involved in that accident immediately for drugs, and I don't think anybody ought to be opposing that—and particularly a fatal. But I don't know the statistics. The ones that I gave are generally cited. Twenty-three percent of everybody going to work today is on some form of drugs or under some form of influence, and that just can't be tolerated in construction; there are too many inherent dangers.

Senator Dodd. I don't disagree. And I picked up on the last thing you said, and I think you have hit a sensitive point with me. I wish we would talk about these issues in terms of substance abuse because there is this preoccupation with drugs, which is legitimate enough, but it conjures up all sorts of images in people's minds. The fact of the matter is we lose many more Americans every year from booze than we do from anyone who overdoses on cocaine or heroine. Now, I'm not suggesting you don't want to focus and try and do what you can with drug abuse, but I suspect that an awful lot of those incidences are people who are on booze. Am I right.

Mr. Fordice. You are right.

Senator Dodd. And how we deal with that—because there is a tendency if something is legal that it is okay. But I presume you are suggesting here that substance abuse is the issue.

Mr. Fordice. As far as I am concerned and as far as AGC is concern, they are all in the same category. They have no place whatsoever on the construction job site. There is zero tolerance for either one.

Senator **Dodd**. I hear you. I just wanted to make the point about substance abuse.

Yes.

Mr. **Paradis**. On the substance abuse, I think what I need to say is that I don't think we really know to what extent the industry has a problem, and I think that has to be done. I think it is an issue that is so overwhelming and has so much impact that I think it is an issue that we need to deal with as a separate issue. And I don't think in trying to improve construction safety and health that we can do it justice and come up with a program that we can deal with, but I think it is a single, very important issue that maybe has to be dealt with by itself.

Senator **Dodd**. Well, I agree. And I think here, education, treatment and all kinds of other things can play a valuable role in really trying to help people understand the dangers involved. And frankly, as we point out and I am sure you agree, what happens is that the person who abuses the substance doesn't end up quite as injured as the person next to him. It is the innocent victim. And to the extent that people can be aware that it is no longer just the problem of being drunk or on drugs that causes the problem for himself, but he endangers everybody else around him, and on that basis to increase education efforts and such can contribute significantly.

We had a big meeting in Connecticut with the Governors and the business community, and they sort of agree with you; this is industry-wide in the State of Connecticut. There was a survey done of them in terms of what they believe to be the problem of substance abuse in their businesses, and it was incredibly high what they believed to be the problem. They were all admitting they don't go around and test everybody every day, but they think it is high. And how you can start to reduce that level of involvement is what we are working on. Among the techniques they are using is the education technique of the coworker, the peer pressure technique, which seems to be having some effect. So that's a good point.

Let me just ask you another one or two questions and then finish up—and I may send some to you as well because I have kept you an awful long time and there are others waiting.

I wonder if all three of you would just quickly comment on this. Where fatalities occur on the job site as a result of—let's assume I'll reach a legal conclusion for you—a reckless disregard for safety and health rules, where that has been determined, the question is whether OSHA should seek criminal prosecution and whether or not you think the current penalty scheme is adequate enough.

You heard Congressman Shays talk about the fact that there hasn't been one incarceration for 20 years under the present criminal penalty structure and only 13, 14, 15 actions—I am looking at staff here—by the Justice Department brought in that same period of time.

Do we need to do more in that area? Do we need to get tougher in that area?

Mr. **PARADIS**. Senator, if I may I'd like to have Jim Pakenham address that. Jim is with EBASCO, and he is the day-to-day safety manager for EBASCO.

Mr. **PAKENHAM**. I think for those who abuse the regulations and the workers, they need to be brought to justice. There are those occasions where people have the devil-may-care attitude. In those situations, which have been identified in a number of cases, there need to be some criminal sanctions brought against those folks.

Senator **DODD**. The impression I would have when you look at the statistics, where we have some criminal penalties on the books, and you find out that no one has really paid a price, at least based on what is on the books—does that message get out? I mean is it kind of, right, you do this thing, and you may end up paying a fine or so on, but as far as really getting serious, not a single individual, not a single person in over 20 years has ever spent a day incarcerated, and only a handful have even had actions brought against them. What kind of a message is that?

Mr. **PAKENHAM**. I don't know of anyone that is worried about it.

Senator **DODD**. No one is worried about the present scheme, that's for sure.

Mr. **PAKENHAM**. Right.

Senator **DODD**. Ed.

Mr. **TRAVIS**. I have somewhat of a problem with this. I don't know all the penalty schedule for OSHA. Perhaps rather than increasing the penalties, maybe the situation that is already in place might need to be enforced a little bit more than what it is. But I have never met, I am not aware, I don't know of any contractors who knowingly go out and try to injure or harm their employees in any situation. I have never met one. I have never seen a case. I just can't envision that, I don't understand that.

I don't know if this is appropriate or not, but I somewhat take offense at Congressman Shays' allegations that the construction industry is murdering employees. I think that casts the construction industry in a light that the construction industry does not need to be cast in and certainly does not deserve. Accidents do take place; people do get killed, and it is unfortunate, and we need to do something to try and remedy that situation. But——

Senator **DODD**. I wasn't talking about knowing; I said reckless disregard for safety. There is a different standard there. I presume if someone knowingly went out and tried to do in a worker—I hope we're not having a debate on that issue. What we are talking about is reckless disregard for people's lives. That happens, Ed, with a lot of frequency.

Mr. **TRAVIS**. I'm not convinced that the penalty situation should be modified but perhaps what is in place might need to be enforced.

Mr. **FORDICE**. If it happens, Senator, how can we structure our laws so that they are totally one-sided so that there is no possibility of penalizing that employee, who might also have exercised total, reckless disregard, and that has happened, and he has caused either himself, or worse, as you said, an innocent fellow employee to get killed. Surely we've got to have both.

The Province of Ontario in Canada does that. There is a possibility of legal sanction and imprisonment or whatever on the employee as well as the employer, and if we are going to have it for the employer, we ought to have the employee involved in there, too.

Senator DODD. All right. Well, again I thank you. I have kept you longer than you probably planned, and I appreciate your taking the time. You have come a long way, from Texas and Mississippi, so we thank you for coming the distance to be here with us today. You are more than welcome to stay and listen to the next couple of panels. We may have some additional questions for you that we'll submit for the record, and if you could respond in writing to us at your earliest convenience, we'd appreciate it.

Mr. FORDICE. Thank you, Senator. Our staff at AGC is always available to and I know has worked with your staff, and we are perfectly willing to continue that.

Senator DODD. I thank you very, very much.

As our next panel, we call Mr. John Focht, who is with the American Society of Civil Engineers; Thomas Hickey, with the American Consulting Engineers Council; and Neil Norman, President-elect of the National Society of Professional Engineers. We thank all three of you for your patience in sitting through this morning. I have been able to watch Mr. Hickey's head bobbing up and down, agreeing and disagreeing along the way—I think I know everything you are going to say and agree to. But I know you all have strong feelings about these questions and are involved in them all the time, and I am very interested in hearing your viewpoints.

We'll begin with Mr. Focht.

STATEMENTS OF JOHN A. FOCHT, JR., PRESIDENT, AMERICAN SOCIETY OF CIVIL ENGINEERS, WASHINGTON, DC; THOMAS J. HICKEY, AMERICAN CONSULTING ENGINEERS COUNCIL, WASHINGTON, DC, AND NEIL A. NORMAN, PRESIDENT-ELECT, NATIONAL SOCIETY OF PROFESSIONAL ENGINEERS, ALEXANDRIA, VA

Mr. FOCHT. My name is John Focht. I am currently the President of the American Society of Civil Engineers.

ASCE believes that safety on the American construction site can and should be improved, and we as an organization are committed to assisting Congress in achieving this important goal.

The discussion this morning I think has illustrated how difficult it is going to be to draft some legislation that will truly enhance construction site safety without unduly burdening some or all of the participants, particularly smaller firms.

I'd like to deviate a little bit from the prepared testimony to comment on a couple of things that I'm beginning to hear from this morning's testimony. It seems to me that the problem of construction site safety could almost be divided into two components. One of them is really the occupational or the worker safety component, the one in which he is involved and the usual safety engineer is involved with. But the other one is the problems with temporary construction. These really are the ones that make the headlines—the L'Ambiance Plaza failure and a number of others in which there really is a failure in design, a part of the temporary construction that then results in a number of deaths in one accident. That is the kind of accident I think that ASCE is particularly concerned about, because it usually in some way or another does relate to engineering design.

I'd like to come back to that one again, but I really believe we have a little bit of a problem in that we are in this bill attempting to assign to one individual both responsibilities.

That leads me on to the second one, to answer a question that you asked some of the earlier panelists, and that is can we get one inspector either for OSHA, or can we get a construction safety specialist who is sufficiently skilled in all aspects of the various different trades and all of the problems. I am afraid we cannot in a single individual, particularly as we look at the more complex and more sophisticated types of projects.

But I do think that it is important to note that the current bill, S. 930, probably needs to be strengthened with respect to the critical temporary construction such as scaffolding, bracing, shoring, hoisting devices. ASCE believes that the critical temporary construction needed to facilitate completion of a permanent facility should be designed by a registered professional engineer who is a consultant to or an employee of the contractor.

S. 930 or the regulations that are developed from it needs to establish a process—and it is more here on the process than on the individuals—but a process whereby the safety aspects of temporary construction are recognized at the inception of a project so that the design of the temporary facilities is executed by a registered professional engineer.

I think it is worth noting that ASCE has a new standards committee working on design loads on structures during construction. This committee is only about one year old, and it will probably take them another couple of years in order to complete their work.

Mr. Chairman, ASCE believes that real advances in worker safety on construction sites occur when there is attention and dedication to safety by all of the project participants. And we have heard already this morning from most of the groups that they are putting forth efforts of that sort.

Unfortunately, just as an outsider looking at it, it seems to me that S. 930 directs considerable focus on the contractor, but very little on the worker. Construction workers after suitable training or instruction by their employers should be responsible and accountable for their personal actions. I don't think employers should be penalized in cases where the accidents are caused by worker carelessness.

I think we also need to try to do something so that——

Senator Dodd. Excuse me. Do you know of incidences where that has occurred?

Mr. Focht. Yes, I do know of one. It is one in which we had a particular involvement. An employee jumped down in a hole to recover his hard hat that he had dropped in it. He got out the first time, and as he climbed out, he dropped it again and went back in the hole—and at the same time, there were some people there, trying to tell him do not go in it, but get a stick or a rake and get it out. It was just purely an activity that he should not have been engaged in.

Senator Dodd. What happened there, though?

Mr. FOCHT. This particular happened to have been a case where the ground was frozen, and he stayed in the hole too long and suffered frostbite and freezing to a portion of his hip. And he should not have gone in the hole.

Senator DODD. And the company was held liable?

Mr. FOCHT. I think so.

Senator DODD. OK. Go ahead.

Mr. FOCHT. There has been a little mention this morning about owners, and in some way or another, we throughout the whole construction trade need to be sure that owners are much more interested in construction site safety and persuading them that they need to make safety an important consideration in their contractor selection and to try to even permit inclusion in the competitive bidding some sort of evaluation of safety.

We need to provide incentive for safety on construction sites. And included in my written testimony is reference to an article that was in Engineering News Record of a particular project where there was a great deal of participation on the part of the owner, the contractor and the workers.

In general, Mr. Chairman, ASCE believes that attention and dedication to safety by all project participants is essential to achieving improved safety on all construction sites. ASCE favors a Federal approach that will improve construction site safety that encourages cooperation among the parties involved in a project, rather than an approach that is chiefly punitive, administratively burdensome and that will tend to foster adversarial relationships.

We support the concept of a construction safety specialist but recognize we may be giving more responsibility to an individual than he can receive adequate training for. In particular, the training requirements currently in the bill I think are grossly inadequate—40 hours of training is not sufficient except maybe for the most simple job.

But that individual, whoever he is, must be able to provide at least the occupational safety considerations that are on a project. I don't believe that we can necessarily rely upon that individual with primarily the occupational safety background to recognize when there are difficulties in the design of the temporary facilities, because these I think do require the actions and the design of a registered professional engineer, and consequently, I think it is the process that we need to establish in order that those critical features are appropriately designed and we avoid problems such as existed at L'Ambiance Plaza.

ASCE offers its help, Senator, in providing technical assistance in any way that it can in we think refining the current act, and we stand ready to give you a hand.

Senator DODD. Thank you very much. We appreciate that. Also, I am sorry to have interrupted, and I did not intend to take away from your time. We thank you for your testimony.

[The prepared statement of Mr. Focht follows:]

PREPARED STATEMENT OF JOHN A. FOCHT, JR.

Good morning, Mr. Chairman and Members of the Committee. I appreciate the opportunity to appear before you today to discuss the important matter of construction site safety. My name is John A. Focht, Jr., and I am currently president of the

American Society of Civil Engineers (ASCE). Founded in 1852, ASCE is the nation's oldest engineering organization and has 108,000 members. I am also chairman of the Board of Fugro-McClelland, Inc., a consulting engineering firm in Houston, Texas.

Mr. Chairman, ASCE believes that safety on America's construction sites can and should be improved and we are committed to assisting the Congress in achieving this important goal. How best to draft legislation that truly does enhance construction site safety without unduly burdening builders, particularly the smaller contractors, is the challenge facing this committee. While statistical data on construction related injuries and fatalities in the U.S. needs to be improved, ASCE believes there is enough evidence of a problem to justify congressional concern.

A July 1988 report of the National Safe Workplace Institute cites the International Labor Office, a United Nations agency, as reporting that the U.S. annual construction fatality rate of 39 deaths per 100,000 workers compares unfavorably with those of the United Kingdom (15), Greece (16), Finland (18), New Zealand (18), Spain (24), and France (30).

A Business Roundtable report attempted to quantify the issue of construction safety, utilizing information developed for it by Stanford University's Department of Civil Engineering. The report stated that work-related injuries and illnesses in construction occur at a rate that is 54 percent higher than the rate for all other industries combined, and that accidents cost $8.9 billion annually, or 6.5 percent of the dollars spent annually by users of industrial, utility, and commercial construction. It further stated that this cost of $8.9 billion for accidents is a controllable cost in the construction industry, and that it can and should be reduced.

Under the terms of S. 930, the construction contractor's responsibility and authority for general supervision of a construction project and for construction site safety is preserved. This represents a significant and welcome shift from the terms of S. 2518 in the 100th Congress, which would have assigned responsibility for construction site safety to an engineer or architect designated by the project owner. ASCE opposed the provisions of S. 2518 requiring that safety aspects of construction projects be supervised by a professional engineer-architect designated by the owner as unrealistic, because (1) the contractor's control over construction activities places him in the best position to accomplish this task, (2) a change in the traditional working and contractual relationships would be disruptive and foster conflicts and delays, and (3) such a change would place an owner or an independent professional engineer in a position of being responsible for the actions of others not under his control.

S. 930 gives responsibility for construction safety to a construction safety specialist, a concept that ASCE endorses. ASCE is in favor of a qualified employee or consultant of the general or prime construction contractor being placed in responsible charge of the safety aspects of a construction project, with appropriate authority from the contractor. The primary qualifications of this employee or consultant should be in the area of construction safety principles, rules, and practices appropriate for the particular project. As I understand the current draft, his responsibilities also include performing or arranging for observation of the installation of temporary structures, and planning or designing and observing critical construction means, methods, techniques, and erection sequences.

Mr. Chairman, we do have concerns about potentially insufficient training requirements for construction safety specialists. According to S. 930, the construction safety specialist (CSS) will have successfully completed a minimum 40-hour course of study on construction health and safety, or have received 18 months of on-the-job training with a certified CSS. In some cases these minimum requirements may be satisfactory; however, on large, complex or relatively hazardous projects, additional training requirements appear prudent. This matter of CSS training can probably best be left to the Department of Labor which must implement this program.

S. 930 proposes a significant list of responsibilities to be undertaken by the CSS and proper training will need careful examination.

S. 930 needs to be strengthened with respect to critical temporary construction, such as scaffolding, bracing, and shoring. ASCE believes that critical temporary construction needed to facilitate completion of a permanent facility should be designed by a registered professional engineer who is a consultant to or an employee of the contractor. S. 930, or the regulations developed from it, needs to establish a process whereby the safety aspects of temporary construction are recognized at the inception of a project so that the design of the temporary facilities is executed by a registered professional engineer. It is worth noting that ASCE has a new standards Committee on Design Loads on Structures During Construction. This year-old committee is working to develop a standard within the next two years.

Unlike its predecessor in the 100th Congress, S. 930 does contain provisions for enhanced education and training through the Construction Safety and Health Training Academy. The Academy is established for training safety and health inspectors for OSHA and certifying the construction safety specialists. ASCE would favor expanding education and training programs for the benefit of construction contractors, workers and engineers as well.

Mr. Chairman, ASCE believes that real advances in worker safety on construction sites will occur when there is attention and dedication to safety by all project participants. S. 930 directs considerable focus on the contractor but very little on the worker. Construction workers, after suitable training or instruction by their employers, should be responsible and accountable for their personal actions, such as knowing and observing safety rules and safe work procedures; and using and wearing required clothing, equipment, and protective devices. Employers should not be penalized in cases where accidents are caused by worker carelessness.

Owners too should become more interested in construction site safety by making safety an important consideration in contractor selection whenever permitted and by providing incentives for safety on construction sites. Mr. Chairman, I would like to call you attention to an article from the September 28, 1989, ENR which described the success of an owner and contractor in developing an incentive plan to enhance worker safety.

There are a number of provisions in S. 930 on which ASCE has taken no position, because these issues do not seriously affect the practice of civil engineering. We have no doubt that the contractors, OSHA, and the labor unions will debate these matters in spirited fashion. These issues include the inspection system, recordkeeping, and notifications; the magnitude of criminal penalties; requiring health and safety programs; and requiring construction process and safety plans.

The provision in S. 930 to create the Office of Construction Safety, Health and Education within OSHA would basically codify the current Office of construction, Maritime and Health Engineering Support, which was established in 1988. ASCE would favor Congress providing adequate funding and support for the current Office of Construction, Maritime and Health Engineering Support before creating yet another new office.

As a result of a recent meeting with Assistant Secretary of Labor Gerard Scannell, ASCE is strongly considering preparation of a document defining the relative roles, responsibilities, and limits of authority of owners, design professionals, and constructors on constructed projects. This document would become a chapter in the ASCE Manual of Professional Practice for Quality in the Constructed Project. The current manual does not address construction site safety. The new document would focus on critical temporary construction, its design, and installation, but probably would not touch on the myriad worker safety issues on the construction site. The contents of this new chapter will follow the concepts presented herein and in ASCE Policy Statement 350, "Construction Site Safety."

In general, Mr. Chairman, ASCE believes that attention and dedication to safety by all project participants are essential to achieving improved safety on construction sites. ASCE favors federal development of an overall approach to improving construction site safety which encourages cooperation among the parties to a construction project, rather than an approach which is chiefly punitive, administratively burdensome, and which tends to foster adversarial relationships.

From ASCE's perspective, S. 930 corrects a major problem found in the previous version of this legislation, which assigned responsibility for construction safety to an engineer-architect working for the owner. ASCE supports the concept of a construction safety specialist (CSS) however, careful consideration must be given to adequate training for the CSS, who will incur tremendous responsibility and liability under this legislation. Critical temporary construction, such as scaffolding, shoring, and bracing, should be designed by a professional engineer working for the contractor. Many of the other issues in this bill, such as penalties, safety and health programs, and construction process and safety plans, will be debated by those groups directly impacted by these provisions.

I look forward to working with the committee in refining the Construction Safety, Health and Education Improvement Act of 1989.

Senator DODD. Mr. Hickey.

Mr. HICKEY. Good afternoon, Senator.

My name is Tom Hickey, and I am Vice President and General Counsel of Malcolm Prairie, Incorporated. We are consulting environmental engineers, and we have been doing business for about 100 years.

Today I am representing the American Consulting Engineers Counsel, which is a trade association of more than 5,000 engineering firms in this country, and we have approximately 156,000 employees, the vast majority of whom are engineers or scientists or similar technical professionals.

There is an advantage and a disadvantage to coming on late in the game here—much of what we wanted to say has been said. But by the same token, we can see some of the things that haven't been said.

One of the things is that there is a missing party from this hearing, and that is the owner. The owner, as John has referred to, has a very substantial part in this process, but too often he is not obliged by law to enforce that obligation or somehow, because of economic necessity, it is in his interest not to enforce it.

There are municipal and State owners of projects who are immunized by law from the enforcement procedures under OSHA. That is a disincentive to their being involved. That is a disincentive when we as the engineer note a problem in the course of it and say, hey, owner, there is a problem here, and this contractor is not listening to us, and we can't get that owner to do something about it—why—because there is no incentive for him to do it.

The other part of the owner part that is missing here is the contracting process. Again, John has referred to that. The American way is to do the public bid, and that's a good process and usually brings in a lowcost process. But it also is biased against safety. Safety is a peripheral concept, and I don't think that I'm saying something I shouldn't be saying. It is something that a contractor can look to trim. He can't look to trim the number of yards of concrete he puts in a job or the amount of steel or the control equipment. But somehow, if he can cut a corner, that is one place where it can be cut. And I don't want to throw roadblocks in this process; there are ways of dealing with that. There is a new process that we have used in several major projects called the competitive bidding process, the competitive negotiation process, where the deal is negotiated first so that all the contractors understand what it is they have to bid, and they have the opportunity to disagree with it or to bargain over it before the project is bid, but they all understand and can't say they can't understand it after the project is bid.

Senator **Dodd**. Tell me that again. What do they do?

Mr. **Hickey**. Prior to a project being bid, the contractors are brought in as a group, either singly or as a group, and told here is the technical specification, here is the contract that we want you do bid—now, what do you think about it? Tell us what you have a problem with. Do you have a question about the safety? Do you have a question about the concrete? Do you have a question about this or that? And then we can resolve those problems and rewrite the spec, rewrite and contract and say now, you all understand it—bid it. You are all on a level playing field.

Senator **Dodd**. Has that worked pretty well?

Mr. **Hickey**. It works wonderfully, wonderfully. We have had significant success with it in major projects.

Another thing is that again—and you saw my head shaking about the workers' part in this process—when I drive or walk by someone driving a jack hammer in the street, and he has no earplugs, no eye protection and no helmet on, I shudder. If they get hurt, maybe the contractor, who has the legal responsibility as was stated here earlier, will receive a worker's compensation claim, but his loss is limited to that worker's compensation claim. The engineer who designed that job and who has no part in that construction process is now a target, and we are regular targets of the injured worker—why? Because we have no shield, we have no limitation on liability; we happen to be a part of the process. That doesn't work very well.

So I think the worker, perhaps, if he has contributed to this problem, should be held to account for that. Maybe if he is not wearing the construction hat, he should be 50 percent contributorily negligent for that, because certainly, that may have caused his problem. If he has been taking alcohol, certainly, you can drive by the construction site and see them drinking a six pack at noon. That doesn't make them any more competent going onto the job that afternoon. We don't allow airline pilots to do that, and we don't allow drivers to do that. If a driver does it two or three times, we may put that driver in jail.

Why should the construction worker, who is in a far more dangerous activity, endangering not only himself but others, be allowed to be free from being responsible for that act?

If we have a worker in our company who is not behaving responsibly, he or she is let go. Why should a construction worker be immune from that kind of responsibility?

Funding of the OSHA effort is always a problem. We know there is the Gramm-Rudman restriction. Why not, since safety is an integral part of the process, make it a cost to the process? Why not make the project pay a safety permit fee or something that may help fund the OSHA obligation—get competent people onto the site.

I know we don't have much time left, but I share John's and everybody else's concerns about the construction safety specialist. They are just not going to be able to do it by themselves. It has to be a team effort.

I have some notes here——

Senator **Dodd**. Take your time.

Mr. **Hickey**. One of the problems in the bidding process is that the low bidder is often also the low incompetent bidder. It is hard to know that. You can't thoroughly investigate that person. So I guess what I'm saying is that we might want to take a good look at the overall bidding process, and is it appropriate in all cases.

Senator **Dodd**. I remember John Glenn saying it made him a bit nervous to know that he was traveling around the world in the low-bid capsule. I remember being struck by that at the time.

Mr. **Hickey**. Yes. On the private side, there may be a safety incentive added to the contract where the contractor gets a bonus for having error-free performance and gets penalized for OSHA convictions.

The solution doesn't lie in making the process more complicated. I agree with the previous witness who said it needs streamlining.

Russell Baker said a long time ago in his Observer column that "Progress is very often an excuse for doing something terrible." I think we have to watch that. There are programs in this country that are being brought to their knees by regulatory overkill, and we don't want that to happen here.

I think that will be all for right now, Senator.

Senator DODD. Thank you very much.

[The prepared statement of Mr. Hickey follows:]

PREPARED STATEMENT OF THOMAS J. HICKEY

Mr. Chairman, Members of the Committee on Labor and Human Resources. My name is Thomas J. Hickey. I am Vice President and General Counsel of Malcolm Prairie, Inc., an environmental engineering firm with more than 800 employees, three-fourths of whom are engineers or scientists. I am both a registered professional engineer and a lawyer. I am here today representing the American Consulting Engineers Council.

The American Consulting Engineers Council (ACEC), a federation of state and regional councils, is the largest national organization of independent consulting engineering firms. Over its 32-year history, ACEC has worked to improve business and professional conditions for consulting engineering firms. ACEC's more than 5,000 member firms represent 156,000 employees and annually design over $100 billion in constructed public and private works.

I have been involved in construction safety issues on behalf of our firm, and engineering and legal professional organizations for many years.

ACEC commends Senator Dodd for his leadership in addressing the industry wide concern for improving safety on construction sites. ACEC is and will continue to be committed to safe work sites. S. 930 is a far better bill than the preceding bill introduced in the 100th Congress. That bill, introduced largely in response to the 1987 collapse of the L'Ambiance Plaza building in Bridgeport, CT, and other construction-related accidents, would have assigned and mandated responsibility for the supervision of job site safety to a professional engineer-architect registered in the state where the project is located. It and a House companion bill had the co-sponsorship of the entire Connecticut congressional delegation.

ACEC and other engineering/architect/construction groups engaged in an active dialogue with both congressmen and their staffs, as well as the AFL-CIO Building Trades Division (which had considerable input to the legislation's drafting.) ACEC and others raised concerns regarding potential changes in traditional contractual relationships and contract documents related thereto among the owner, contractor and design professional. An immediate concern centered on which of these entities should be primarily responsible for the responsibilities called for within the bills.

S. 930 amends the Occupational Safety and Health Act of 1970 by placing the responsibility for jobsite safety on the contractor through his use of a "Construction Safety Specialist." This provision alone is a major improvement. The contractor is further required to obtain the services of a licensed professional engineer or architect, if the construction safety specialist determines that:

(1) Such assistance is required for compliance with the on-site safety and health program, a safety and health program of the contractor, or the OSHA Act; or

(2) A particular aspect of the work involves such safety hazards, is so highly technical, or requires such special expertise for safe construction that the contractor could not reasonably be expected to be aware of the risks.

S. 930 creates a new office of Construction Safety, Health and Education within OSHA, establishes a Construction Safety and Health Training Academy to certify construction safety specialists, and calls for significant civil and criminal penalties for willful safety violations resulting in serious injury or death. The OSHA statute would be broadened to enable federal prosecutors to convict employers when they can prove "criminal negligence."

ACEC strongly supports improvements to safety in the construction work place and commends the intent by Senator Dodd and Representative Shays to achieve this objective. Although we cannot support the bills in their present form, we remain committed to working closely with the Labor Committee to perfect a fair and meaningful measure. In that light we offer the following comments on S. 930.

A. To deal fairly with the issue of construction safety, we must first realize that we are working within the framework of a very complex construction process whose elements and procedures vary greatly according to the type, size and relative risk of the project involved. Any new legislation should provide for enough flexibility to address these issues appropriately. New legislation must also differentiate among the roles of the design professional, the contractor, owner as well as any new participant such as the "construction safety specialist."

B. Traditional Owner/Design Professional/Contractor relationships should not be changed or altered by legislation. The Design Professional works under contract for the owner, advising him on administrative and technical matters, and is an employer, agent or advisor to the contractor, as might be inferred by S. 930/H.R. 2254. The bills should be amended to include a definition for design professionals which accurately describes their role in the construction process.

C. The present system relies on the experience, knowledge and innovative skills of the contractor to deliver the constructed product to the owner. The traditional responsibility of the contractor for jobsite safety must be reaffirmed. While the contractor has the ultimate responsibility for assuming a safe construction site, design professionals have certain safety responsibilities:

A legal responsibility to provide their employees with the skills and training to recognize unsafe conditions and the procedures to avoid exposure to such conditions when on the construction site;

—A professional ethical obligation to protect public health and welfare;

—A professional responsibility to understand the processes by which the projects they design are constructed; and

—A duty to bring to the contractor's attention, unsafe conditions observed in the course of the engineers' performance if his duties, to encourage corrective action and to report to the owner if corrective measures are not taken by the contractor.

D. The owner, who has the contractual authority and legal responsibility to stop work for unsafe conditions, has the ultimate responsibility for safety.

ACEC could support a bill which affirms these basic principles. We remain concerned, however, that the following issues are not adequately addressed in the bill:

1. Worker Accountability—No provision is made for employee responsibility for his/her own safety. Every party that is involved in the construction process must be held accountable for his or her own actions. Employers should not be penalized where accidents are caused by worker willful or careless behavior, such as failure to properly use safety equipment provided or required by his employer.

2. Substance Abuse—No provision is made in the bills. All parties involved in a construction process should be encouraged, or indeed be required, to adopt a mutually agreeable program to control alcohol and substance abuse. The program should be designed to ensure the integrity of a safe jobsite without violating the constitutional rights of the worker. ACEC and AGC have a joint position statement on substance abuse calling for "0 Tolerance" in the work place.

3. Qualifications of Construction Safety Specialist—The completion of a minimum 40 hour course of study for certification as CSS is totally inadequate and unacceptable. A specific number of years of increasingly complex construction experience, rather than the suggested 18 months prior to certification should be specified. The educational curricula for programs established by the Secretary to satisfy this requirement should receive adequate funding.

4. Establishment of New Construction Safety and Health Training Academy—Cooperative agreements among the academy, educational institutions, state governments, labor organizations and construction industry employers should be broadened to include engineering/construction trade associations.

5. Establishment of New Office of Construction Safety, Health and Education—This necessitates a plethora of new regulations duplicative of existing standards. The educational program suggested will be costly to the taxpayer and is also duplicative of existing programs.

6. Recordkeeping Requirements—Those proposed are unfairly burdensome and costly for all employers, especially small business employers, and contribute little to increase safety on the construction jobsite.

7. Construction Process Plan—The proposed plan mandates identification of means which will "ensure the structural stability of all buildings, structures, and excavations." It will be very difficult for anyone to "ensure" such structural stabilities beyond those already carried by plans and specifications. Acts of God and certain material failures cannot be guarantees or warranties. This also poses an uninsurable position for A/E's whose professional liability policies do not cover any "insurance" of their role in the construction process, since it binds the design professional to the equivalent of a strict liability standard.

8. Critical Temporary Construction—A provision should be added that critical temporary construction needed to facilitate completion of a permanent facility be

designed by a registered professional engineer who is a consultant to, or an employee of the construction contractor.

9. Liability—Several states have enacted statutes including the design professional in the Workers Compensation coverage for construction projects thereby protecting the design professional from claims by injured construction workers. Federal legislation that mandates the participation of the design professional in construction site safety will, in essence, remove the defense from lawsuits provide by these statutes. These bills should provide a federal defense or immunity for A/E's against claims by construction workers for jobsite safety related injuries.

We have not restricted our efforts, however, to the legislative concern for improving safety. Working with other engineering, construction, and supplier industry organizations, as well as building trades representative many of whom are included among today's witnesses we have attempted to review, clarify and better define the roles and responsibilities of each member of the team in the construction process.

As we observed above, we believe the design engineer and other design professionals have legal responsibilities for the safety of their own employees, both as to training and prevention of exposure to hazards on the construction site. We also believe that the construction contractor has the immediate responsibility for worker safety as well as for the correction of hazards on the site. What is not clear in existing OSHA regulations, and the OSHA field operations manual, is when Section 1910 general responsibility regulations apply and when Section 1926 Multi-employer site rules, which are specific to construction, apply to the employees of firms on the site, who are not employees of the contractor.

We have raised these concerns with OSHA and have had very positive interest from them to work out these issues under current law and regulations. We do not believe the resolution of that responsibility needs new law. What is needed is a clear policy and consistent enforcement. We have stated our commitment to work with OSHA to resolve this and they have responded positively to the offer of the design professionals and contractors to create a working group. This group will explore the current hopefully define a clear test so that the design professionals responsibility is well understood and we can inform our members and assist them to train their employees.

Our President Jim Poirot, whose commitment to quality in construction is unquestioned in the industry, stated the following during our meeting at the Labor Department.

The primary job of the design professional is to work with the contractor to complete the construction, consistent with the design, so that the final product, the building, bridge, tunnel, is safe for the owner and the public to use and operate. It is not the job of the design professional to make sure that the project is safe, as to means, methods and process during construction. We are not trained for that, nor are we specifically experienced in construction hazard reduction and prevention. Moreover, such activities by a design professional are neither insured or insurable, if we assume such responsibility. Therefore the liability exposure for these activities is significant.

We do not shrink from the involvement to assist in the improvement of safety to all workers on the construction site. We are committed to working toward that improvement. But if we are given the uninsurable responsibility by either law or regulation, we can only advise our members to draw back and disengage from participation in the construction process which we do not want to do. If that happens then both the worker and the public loses.

Let me restate that commitment to the committee. We want to stay involved in the legislative process to improve construction site safety. But it must be on a basis of mutual participation by all members of the construction team. It will not be accomplished by disbursing the responsibility to others than those who traditionally accept that responsibility both legally and by industry custom and practice, the owner and the construction contractor.

Thank you for the opportunity to testify. I would be pleased to answer any questions.

Senator DODD. Neil.

Mr. NORMAN. Thank you, Senator.

My written comments are in front of you, so I'll try not to repeat those, but I think there are a couple of points that I may be able to make that are slightly different than my associates have made.

NSPE and all licensed professional engineers are committed to the protection of the public health and welfare through the licensing process, and we also specifically support this effort to find a workable solution to reduce death and injury on construction job sites.

Our strong support of S.930 is qualified in six areas where we think improvements can be made, and I'll touch briefly on two or three of those.

The six areas are: the construction safety specialist qualifications and training; the definition of where PE is needed on the job site, as mentioned by my associates; the question of liability; the employee participation in the safety process; the exemptions from the ongoing act here; and the paper work problems.

In the CSS training, we also felt that the 40 hours specified in the bill was clearly inadequate, and I know it is not your intention to limit these skilled people to 40 hours' training. I would suggest, though, that there is a way to go about this that may find an existing cadre of people out there.

There are licensed professional engineers who are licensed in the safety discipline. In my State of California, we have a safety engineer discipline. There are also professional engineers in other States that are licensed in either the general professional engineering category or one of the disciplines who are safety specialists in some parts of the construction safety process.

There are also certifications in the United States. Safety engineers are certified through an association; industrial hygienists are certified through a very professional association, and there is a certified safety professional association. I'd suggest that all of these have experience and training requirements which may be applicable to filling a good part of the need here in this large group of CSSs that are going to be required.

All of these groups have ethical, professional standards which the CSS will need. The personal standards and the professional competence of each of these CSSs is going to be necessary if they are to know when they have to call in other specialists, because no single person is going to be an expert on trenching, steel work, hazardous chemicals, nuclear hazards, asbestos, etc. We just aren't going to have all of that in one person.

What we need is a professional standard in these CSSs that will give them the self-confidence to take the strong measures they have to and to get the references to other specialists that they need to obtain.

I think these categories of specialists should be mentioned in the act as areas that would be examined by the academy and possibly qualified.

We would like to see the PE needs defined in more detail and we volunteer to work with your staff to do that. We have got some ideas on the subject, and I won't elaborate. You have heard a few examples given here, and I think we may be able to help define that more clearly.

The liability question is very serious, especially for the small contractor, who may not have a CSS or perhaps half a dozen CSSs with these many different specialties on the staff. So it may be necessary to call in a consultant to do this CSS role.

Right now, as you heard, not only does liability insurance coverage not include safety work by engineers on construction sites; it is specifically excluded and probably will be canceled if you take up such chores. But in addition, the engineer coming on site is not protected by the workmen's compensation exemption that the contractor is protected by. So we have a real dilemma here. If these are not your employees as a contractor, and they are consultants, that consultant is totally hanging out when he comes on that site to perform this important task. And we need to address that problem in the legislation in some way.

Employee participation is very important. We feel the employee should give a prudent individual's care to both himself and the other workers. There should be close attention to safety rules by all employees—and I'm not calling them workers; I am saying employees—this means the engineers, this means the foreman, the general superintendent, and it means that when the owner comes on the job site, that owner should be wearing a hard hat also, and when the mayor comes on a visit, or when you come on our site to look at it, you should be wearing that hard hat, because the worst message we can give to the other employees is that if you are smart enough, you don't have to use the protective devices; you can just come on and flaunt them. That happens a lot.

And the last employee participation thing we think is needed is a great deal stronger care for alcohol and drug abuse on the job sites.

The paper work issue is one that everyone is concerned with. OSHA in 1987 took some paper work reduction activities in accepting equipment test certification on construction jobs instead of requiring the new paper. That kind of creative effort ought to be looked at here in order to reduce paper work. In lieu of new paper work on accidents, we might consider using workmen's compensation modification rates, which are available, and 40 States are now using these in order to set their rates.

Labor here has not asked that Congress adopt legislation that would impose an impossible paper work burden on employers, but rather for legislation requiring all employers to rise to the level of those safety-conscious employers who are operating today.

In conclusion, I'd like to say I hope the tone of this bill continues to be the team approach and the system engineering approach. Planning, training and prevention are the answers, not policing and punishment. The philosophy of TQM, the improvement of the process rather than the punishment of the culprits, is where we all need to go together, and if we do, we can get labor, management and engineering working together for a safer and more cost-competitive and schedule-competitive job site. I personally volunteer to work with your staff on this, and I volunteer our construction specialists within our association as well as our legal and legislative specialists.

Thank you.

[The prepared statement of Mr. Norman follows:]

PREPARED STATEMENT OF NEIL A. NORMAN

Mr. Chairman and Members of the Committee: Good Morning. I am Neil A. Norman, a registered Professional Engineer in Mechanical and Nuclear disciplines. I am here to represent the National Society of Professional Engineers (NSPE) as President-Elect and as past national Chairman of NSPE's Professional Engineers in Construction (PEC).

In 1984, in conjunction with PEC, I initiated an NSPE project to examine and clarify the engineer's role in construction safety. In 1987, as NSPE Legislative and Government Affairs Chairman, I established a Job Site Safety Sub-committee which has provided constructive input to Congressional staff on the current legislation. I was recently a participant in the National Institute of Occupational Safety and Health (NIOSH)-sponsored "National Forum on Construction Safety and Health Priorities."

I am a Project Manager for Bechtel Engineers and Constructors. My experience at Bechtel and earlier at Babcock & Wilcox has been principally related to nuclear power engineering, procurement, and construction.

INTRODUCTION

The National Society of Professional Engineers (NSPE) was founded in 1934 and represents 75,000 engineers and engineering students in the United States and abroad in 535 local chapters and 54 state and territorial societies. NSPE is a broadly based interdisciplinary society representing all technical disciplines and all areas of engineering practice, including government, industry, education, private practice, and construction. A majority of our members are involved in some type of design or construction activity.

NSPE's goals include the following: service to the public, advocating the application of engineering knowledge and skills in the public interest, and influencing technical public policy.

NSPE's position on construction job site safety legislation includes the following points relevant to today's discussion:

—The National Society of Professional Engineers supports improved job site safety on construction sites.

—The contractor must take responsibility for controlling the construction methods, means, and safety.

—Certain critical construction operations should be observed by professional engineers who may or may not be the design engineer, and this work should be specifically identified as an additional service within the contract.

—The quality of the completed project should be verified by a professional engineer who may or may not be the design engineer. Completed project quality should not be confused with control of construction safety procedures, which is the responsibility of the contractor as provided above.

—The existing system of contract documents, state laws, and workers compensation laws and liability insurance provisions developed through decades of use, are the basis of much case law and should not be disregarded.

—Government engineers in responsible charge of safety or failure inspections and corrective actions should be licensed professional engineers.

NSPE strongly supports efforts to improve safety on the construction site. Current death and injury rates can be reduced. As apart of an overall effort to achieve this goal, NSPE supports S. 930. That support, however, is qualified by the need to make several important modifications if we are to have workable legislation that will actually result in meaningful reductions in deaths and injuries on the construction site, not just more rhetoric about the problem.

Important questions which we feel must be resolved include:

—The Construction Safety Specialist must have far more than 40 hours of training and must have professional standards, ethics, and training.

—We must set clear guidelines for defining those instances where the services of an engineering design professional are needed.

—With respect to the issue of liability, we must deal realistically with current practices which do not protect the conscientious engineering design professional who undertakes safety responsibilities.

—We must deal realistically with the significant role of the employee in the effort to reduce deaths and injuries.

—We must deal with the question of whether certain types of construction jobs or sites should be exempted from the provisions of S. 930.

—Paperwork and regulations do not save lives, better construction practices save lives. We must insure that in balancing the paperwork burden versus the need for additional data on construction job site deaths and injuries, we keep the ultimate goal in mind.

LEVEL OF EXPERTISE

The first issue I would like to address is that of providing the right degree of expertise at the right time to insure the maximum safety. We have identified three levels of expertise. First, we need to look at the expertise required for compliance with rules on the use of common self-protective devices, such as hard hats, life lines, and goggles. The second category is that of construction which would necessitate the expertise of a design professional.

The third category consists of those construction operations which require the physical presence of a design professional to monitor the safe execution of a particular aspect of construction. A design professional carrying out these safety functions may or may not be the architect/engineer of record who produced the project design. If the project design professional is called upon to fulfill this additional role, the safety responsibility should not be arbitrarily imposed, but rather should be the subject of separate negotiations and compensation.

Types of construction activity which might fall in the second category, requiring the services of a design professional, include: unique or complex scaffolding, unique or deep shoring, construction temporary loading limits on structures, and temporary fasteners. Activity falling into the third category, actually requiring the presence of the design professional, might include the actual erection phase of buildings utilizing new and innovative or nonroutine construction methods, such as lift-slab construction.

Normally, the responsibility for construction safety at sites involving the first and second levels of expertise will rest with the construction contractor. The Construction Safety Specialist (CSS) would be employed by that contractor. If the second level of expertise is required, the CSS would be responsible for seeing that the services of a qualified design professional are obtained.

There are now many construction safety specialists practicing in the U.S. who carry specific credentials such as a Professional Engineer (P.E.) license or certification as an industrial hygienist, safety engineer, or safety professional. The state of California specifically licenses safety engineers, and other states include these discipline skills in a "Professional Engineer" generic title. All states require licensing of professional engineers principally for the protection of the public health, safety, and welfare.

There is a strong need to recognize such formal existing licensing and certification in this pending construction safety legislation. In each state's professional registration law, the restriction to practice only in one's own area of competence is basic. Because of the many complex branches of engineering practice, that restraint must be applied by the professional practitioner him or herself.

Boards of Registration rules and professional society codes of ethics stress and enforce this requirement for self regulation and the mandate to practice only in the area of competence. The recognized licensed and certified groups are, therefore, an available cadre of specialists who can supply many of the CSS persons required.

If only a nominal training program is required in the law without the formal licensing, certification, and ethical commitment of the existing licensed and certified safety groups, then the employees and public safety will not be well served. Individual CSS practioners must have the personal standards and professional confidence to take the strong measures which may be necessary to assure job site safety. The backing of their professional society or organization will strengthen them in this function.

We believe several professionally licensed or certified groups should be mentioned in the statute as being eligible for certification by the Construction Safety and Health Training Academy (The Academy) as qualified CSS practitioners. It should be noted that even some of these groups may require additional training in basic OSHA requirements.

Our challenge is to have the right level of expertise present at the right time. Obviously, many people are knowledgeable of the basic self-protective type OSHA requirements (for example, hard hats and life lines). As we move into the other levels of expertise, the availability of the necessary competency is more of a problem, and the cost of providing that expertise rapidly escalates. We volunteer to work with your staff and other interested groups to develop procedures whereby we can properly match up the need with the appropriate level of expertise.

Clearly, the 40 hours of training called for in the current version of the legislation is inadequate. Defining the appropriate level of training will be difficult. We also offer to bring in our member and staff specialists to assist in this effort, so crucial to the success of the overall program.

LIABILITY

Liability is another issue of vital concern. The most common situation on a construction site places the contractor in charge of safety. Virtually all construction contract documents so provide. And there is logic behind this arrangement since the workers on the site are, for the most part, employees of the contractor or subcontractors. The contractor is "protected", from a liability standpoint, by the state workmen's compensation laws which limit liability to certain prescribed amounts. And the worker is assured of specified compensation without regard to fault.

Many feel the levels of reimbursement provided by the workmen's compensation statutes provide inadequate compensation. As a result, the injured workman or his survivors often look for others for recovery for their injuries. The design professional, other professionals, and the CSS who become involved in the safety activities on the construction site are ready targets. The perception, accurate or not, is that courts and regulatory agencies seem to be moving more toward a standard of strict liability with respect to these individuals. In some cases, either the design engineer of record or an equally qualified professional engineer may be required to inspect and accept the constructed facility.

Our insurers advise us that if the design professional assumes safety responsibilities by contract, their professional liability coverage will be in jeopardy and will probably be canceled. Coverage for safety responsibilities assumed by the design professional is not available. If the design professional were to conduct safety-related activities beyond the scope of their engineering duties, they could be in violation of the contractor licensing acts in some states.

The net effect is to put the design professional in a dilemma. The dilemma is to stay away from the site because of potential liability for safety or to go to the site to carry out quality assurance inspections. Perhaps the answer lies in something analogous to a "Good Samaritan" statute. Such a statutory provision could give protection to the design professional who in good faith attempts to correct a safety-related problem.

A way to achieve this goal is to specifically place the basic responsibility for safety on the contractor and to give the design professional, other professionals, or the CSS the same workmen's compensation protection received by the contractor. At least 10 states have adopted this approach with respect to the design professional. As a minimum, some commonly agreed upon method must be developed to advise the OSHA inspectors as to who has what safety responsibilities on a particular site. We should start with the presumption that the contractor has safety responsibilities unless specifically contracted to others, and that such information is prominently posted on the site.

It is appropriate at this point to commend OSHA for efforts already underway to work more closely with all sectors of the construction industry to deal with this problem. In particular, the establishment of the Office of Construction, Maritime, Health and Engineering Support is a very positive move. Equally important is the fact that the office has been staffed with a director, who is a registered professional engineer, with safety engineers and certified industrial hygienists.

EMPLOYEE ROLE

The next issue is that of the role employees must play in this effort to reduce deaths and injuries. There are those who would place the entire blame on the employee. We do not share that philosophy. There are important roles in this effort for all employees, the contractor, the owner, and the design professional.

However, there is a minimum role that the employee must play. The employee must:

—Do that which is expected of any prudent individual.
—Conform to reasonable and well publicized safety rules.
—Wear prescribed self-protective devices.
—Refrain from the use of drugs or alcohol.

Each construction employee (including owners and managers) must assume responsibility to conform to safety rules, wear and use self-protective devices, and look to the safety of their fellow employees. Construction activities and alcohol or drug use are not compatible. Construction safety plans should be permitted to include programs to detect and curtail alcohol or drug abuse.

EXEMPTIONS

The question of whether certain types or sizes of construction projects should be exempted is a difficult one. Some states have set thresholds based on size, complexity, or number of employees. We do not have access to sufficient data to make a recommendation on this issue at this time.

DATA COLLECTION

The provisions of S. 930, without exemptions, have the potential for generating sufficient paperwork to inundate OSHA. It is clear, however, that additional reliable data are needed. It is our goal to see that necessary data are gathered in the least intrusive way possible and that information is compiled which will actually contribute to the reduction of deaths and injuries.

Earlier this year OSHA reminded us of some of the creative methods which it has used to reduce the paperwork burden on the construction industry. The reference was to a standard issued by OSHA in September of 1987 which permitted employers in the construction industry to certify that they conducted the necessary tests for equipment maintenance instead of keeping detailed records on the tests. Such creative techniques need to be applied to this legislation.

Existing workmen's compensation experience modification rates may be useable in lieu of burdensome new requirements. Currently there are three types of such ratings. The Interstate Experience Modification rating is used in 40 states; the Intrastate Experience rating is used in four states; and the State Fund Modification rating is used in six states.

This data could be used to establish a composite data base from which contractors with particularly high experience factors could be targeted for more frequent and more extensive inspections.

In addition, contractor safety records, including experience modification rates, could be made a required part of the construction bidding process. A modification rate-based system should provide for the following:

—Establishment of a reliable data base on the safety records of all construction firms based on figures already available—the worker's compensation experience modification rate. We have discussed this with a major insurance carrier who assures us that the data are available and cover all types of operations from the smallest to the largest firms.

—Use of the present data base(s) for a start to target extensive and frequent inspections of contractors who have an unsatisfactory experience modification rate.

—Make contractor safety records, including experience modification ratings, a necessary part of construction bids, and an unsatisfactory safety record one possible basis for rejection of a bid.

—Provide for a simple start-finish type of reporting for each project so that OSHA can assess the need for targeting of inspections.

CONCLUSION

Mr. Chairman, members of the committee, the National Society of Professional Engineers has identified construction job site safety as one of its highest priority issues.

We must find the methods and the means to provide the safest possible workplace. However, these methods and means must recognize that the contractor is the professional who can best control the construction site and his employees, and that education and training are the key elements in the effort.

NSPE is committed to the effort to find a workable solution to the problem of death and injury on the construction job site. We look forward to working with you to that end.

Construction safety depends on the integrated cooperation of labor, management, and engineering on the job site. We urge you to take care to insure that the tone of the bill reflects a teamwork approach and the concepts of systems engineering and quality management. This will enable us to make our construction industry competitive in terms of cost and schedule as well as a safer and more satisfactory environment in which to work.

On behalf of the National Society of Professional Engineers, I express our appreciation, Mr. Chairman, for allowing us the opportunity to appear before you today.

Senator **Dodd**. Thank you, Mr. Norman. I appreciate it immensely.

You didn't identify but you made mention, Neil, that there were some areas in certain types of construction that ought to be exempt from the provisions of 930. What are you speaking about? Give me some specifics?

Mr. **Norman**. Well, I didn't identify that I knew what they were. I think you have to deal with exemptions to make this bill manage-able. It is not clear, based on data that we have seen, that small sites are less safe than big sites. And it may be that it is the type of work that is of interest. Certainly, connectors and steel work face more hazard than other steel workers. Trenching workers face more hazard than most other workers on the site.

There are types of activity that we may want to focus on in lieu of other types of activities to identify these exemptions. I don't have a good enough data base to do that, or I would have made some more specific suggestions.

Senator Dodd. Since you've offered, I'm going to take you up on your offer. That notion, I am all ears on it; I'd like to hear what people are suggesting in that area. I think your last comment is a very important one. I think the tendency is to look at size as a determining factor, and I always get very nervous when that is the criterion, because it can be a small job but highly dangerous.

Mr. Norman. We lost three people in San Francisco about two years ago in a trenching accident that only had three people working on it. They died, and it was a clear violation of all kinds of safety regulations when it happened—and probably the employees weren't even aware of that those regulations were.

Senator Dodd. Which is another part of it, too.

Mr. Focht. We had a trenching accident in Houston, and it took the principals of the firm. There were two of them in the trench and a worker. So it is not size.

Senator Dodd. No. Well, listen, you've been great here today with your testimony, and I am going to continue to call on you. I find your perspective—I think the owner point that people have raised here is a very important one, too. I'd like to hear some ideas on that——

Mr. Hickey. I'd like to raise just one other little aspect of it. That is that very often, the eyes of OSHA are on the mud below, not the sky above. We're doing a major wastewater project in New York City, and the OSHA inspector came on the site, and among several citations he issued, there were some cigarette butts in the area of the site where there was a no smoking sign. Our people had never been there. We were issued a citation because there were cigarette butts in a no smoking area. Now, that is silly, and that time could have been better spent in looking for a real safety issue.

Senator Dodd. I don't think you'll have any argument with anybody on that kind of thing.

Mr. Focht. What I want to suggest is that perhaps OSHA might go into the education process rather than the citation process and maybe the first time around, educate through warning notices rather than getting people involved in that legal process in which the lawyers are called out. That doesn't get anybody any safer.

But I think that the owner has to be very, very much more actively involved in this process.

Mr. Focht. And Senator, can we emphasize—we probably were a little polite—the owner who is not interested is the public agency, by and large—not necessarily the big government—the Corps of Engineers, the Bureau of Reclamation, those agencies are. But the cities, the States, the municipalities and the counties, they are interested in the cheapest job. Safety is not their concern.

Mr. HICKEY. They will often cause us to use old-fashioned construction documents that have no relationship to the risks of today's business, because they don't want to pay, let's say, for the cost of typing up a new set of documents. And that eventually contributes to the lack of safety on that site because the relationships are unclear, confusing, and people don't know who is in charge.

Senator DODD. I think that is an excellent point. It would not have occurred to me to focus on that particular aspect. I think it deserves further examination as to how we deal with that, because I can see that being the case, particularly—I don't need to tell you what towns and cities are going through. I mean, they are feeling the crunch, and the demand is for the new addition on the school, or the new addition on the town hall or whatever else it may be, and the pressures are so great on them. But obviously, if they are disinterested in the safety aspects of the thing, it doesn't help maximize to the extent possible the thing we are all interested in.

Again, I really appreciate your patience in waiting a long time here this morning.

Senator DODD. Lastly, Dan Paine, President of Sinco Products in East Hampton, CT. He is a neighbor; he lives about 10 miles away from me. We appreciate your being here, Dan.

Matt Burkart is the President of Aegis Corporation in Southampton, PA.

Mea culpa for the wait, but I hope it has been instructive. I have certainly learned a lot here this morning. These are things you folks already know, so I am probably preaching to the choir on these issues. But I appreciate all of you being here, and I particularly thank you, Dan.

STATEMENTS OF DANIEL M. PAINE, PRESIDENT, SINCO PRODUCTS, INC., EAST HAMPTON, CT, ACCOMPANIED BY BARRY A. COLE, MANAGER, CONSTRUCTION SAFETY CONSULTING FIRM; AND MATTHEW J. BURKART, PRESIDENT, AEGIS CORPORATION, SOUTHAMPTON, PA

Mr. PAINE. Thank you very much, Senator Dodd.

Just for the record, I would point out that I am Dan Paine, and I am from East Hampton, CT, which is right up the road from you, as you point out. I am President of Sinco's group of companies.

First of all, I might point out that we are, number one, small, and that among our companies, we have a manufacturing company of safety products; we have a manufacturing company of construction tools and equipment; we also have a construction safety consulting firm and a construction company, which is a very small specialty construction company.

For the last 2 weeks, as a matter of fact, I have been spending my time in Europe where I have been a special guest of the Institute of Occupational Safety and Health, which is a British society over there—and I might add that a lot of the things that we are talking about in this proposed legislation are in effect in Europe at this particular time. But as a result of that, I have not been here as much as I would have liked to have been, and I have asked Barry Cole, who is the manager of our construction safety consulting firm and also of our construction company to just make some comments.

Before he does, I want to say overall that we were fortunate enough to be involved with Jeff Anders of your office and consulted on some of the things that are going on, and we are most supportive of this bill; we believe it is a bill that not only can we all live with, but we must have.

Barry Cole.

Senator **Dodd**. Barry, thank you for coming.

Mr. **Cole**. Thank you, Senator Dodd.

I am honored to be here, and I thank you for the opportunity.

As indicated, I am managing two construction safety-related firms for Sinco, Inc. One is a very small contractor. In fact, we are starting a job today in California, and we have worked nearly most of the States. But we are small, and we have the same problems as a small contractor.

In the last 11 years prior to working at Sinco, I spent as a corporate and job site safety director. I don't have a degree, I might add. I learned what I learned from seminars and various other training opportunities, but mostly from the people out in the field.

I have committed most of my adult working life to construction safety and intend to continue. I then speak to you with safety professional perspectives—how are we going to do what we're talking about on the job site—and with overtones of a small contractor, perhaps.

I am a firm believer that our collective abilities can improve construction safety if we properly focus them. I am a believer in a stair-stepped approach to improvement—nobody can come in with a sweeping reform and change the way we have done things, and the evolutionary process has to start today, with this bill, and you have to look at it for months and years to come, and we are going to have to change it legislatively and administratively over time.

This is, however, a great beginning, and it is a fundamental approach. No one bill will end all accidents.

I would also like to point out as an aside, I don't want to diminish the significant impact and the learning opportunity of things like L'Ambiance Plaza and the Willow Island collapse, and the grandiose coverage that they get. But we think there are between 2,500 and 3,000 other deaths a year, one at a time, two at a time, and this bill can in fact impact 50, 60, 70 percent of those men and women who are dying, and as a corollary and as an adjunct to that, will impact on the L'Ambiance Plazas and the Willow Islands. But we need to look down to the man and the small contractors who are having these accidents.

I, too, served with Jeff Anders, at Jeff Anders' request, on the committee that helped create some of this language, and I wanted to give you a feeling, my feeling as a safety professional, of what that committee said. Sometimes we lose something in the translation when these legislative writers write these things, but the intent and the tone that was there was not only very supportive and very meaningful, but needs to be remembered when we look at changing anything that is here. We need to remedy a few wording problems. But we look to the intent and let's try to at least get that into the record.

Number one, this is a workable compromise. All these specialty concerns that you have heard today were talked about then. But the point is that 16 or 17 people who represented a cross-section said let's look at four or five things; let's look at the basic problems that we can address easily. And then next year, or two years from now, let's look at something more specific like drugs or something like that.

The spirit of the meetings is again that we will start on something small and something meaningful. The idea of safety is as a management science; it is an evolving thing in the United States. Twenty years ago, they wrote rules that said don't do this, and do this, and don't do this. Now we realize, as the gentleman, the painter from the specialty group, said, we still have a problem. We know that he is not supposed to work without a safety belt, but we can't get him to do it. And yet unfortunately this gentleman rationalized that there was something okay in that. I submit to you, Senator, that if that gentleman were painting polkadots with his spray gun or stripes, instead of a thorough coat, as specified in the documents, that the painter gets paid to do, there would be something done about how he was doing his job. The fact that he wasn't wearing a safety belt can also be effectively "managed"—the operative word, again, is "managed." His supervisor was there on the job.

The gentleman that was in a trench who got frostbite, I don't even understand that—and I don't mean to diminish that——

Senator DODD. I didn't, either, so I didn't pursue it.

Mr. COLE. I'm sure that there is some explanation in there. But the point is where was that man's foreman. Maybe the problem was that they needed chin straps on their hard hats, and somebody might have been able to ask that question—how do I keep this guy's hat from falling off—not should he or shouldn't he jump in a trench. That's what management is about. It has nothing to do with discipline or enforcement or knowledge. It has to do with a query, an inquisitive mind, a person who can stand back and say I'm going to solve this problem, and I'm going to manage my job site.

Out of that meeting, we ended up with some principles, and I'd like to share those with you. You must quantify and measure your problems. The Bureau of Labor Statistics at the request of OSHA doesn't know what the hell is going on—and I am saying that emphatically because I want you to hear it emphatically. We don't know how many people get killed in construction, much less injured, ill or otherwise. The reason—they sample some 20,000 or 30,000, maybe 40,000 construction—there are 60 million that we need to talk about. We need to know; we can't just extrapolate. In addition, OSHA doesn't know where most of them are. The Dodge reports? The Dodge reports are a commercial entity that people subscribe to. They put their jobs in because they want people to bid on them, and they put their names in there so that other people can have knowledge of the job. If you don't want your name in the Dodge report, it doesn't go in, which means OSHA can't find you—for the most part; there are some exceptions.

As a management science, you must address your available resources. We are not asking for tremendously extra-large amounts of new resources; let's just focus what we have.

We must have accurate and meaningful statistics. The part of the bill no one has talked about, which is the registration of jobs—maybe a simple, three-by-five card or a single page that is sent off to Bureau of Labor Statistics in OSHA's name that says here is a job, maybe run a summary of the jobs on a monthly basis, and let OSHA target from that. That is a beginning. At least you have a global pool of who is really out there.

Also we are going to get statistics. At the end of those jobs, the bill asks for them to send in a report. It should be a simple, reasonably, meaningful report—basic. From that, we'll find out do large contractors have accidents, do small contractors, do specialties, do generals. And OSHA will be able to target, as your bill tells them to do, effectively.

You must train your educators. We have educators who do not understand these safety management principles. The enforcers don't understand these safety management principles. We have to train them. Your bill asks for an education opportunity for OSHA and for construction supervisors.

Documentation. People complain about it, I complain about it; I don't like it. The point is documentation is a management tool, and the benefits of this tool are increased awareness by the individual who is told do it—awareness—awareness of his responsibility as a supervisor to do a certain amount of safety work. It also gives him some accountability. If you sign a piece of paper, you'll be pretty sure that what is on there is meaningful, and you are going to follow through. If you say you are going to tell your employees to wear their hard hats and enforce it, and then you don't do it, well, you've basically incriminated yourself. We are asking construction supervisors with some limited training—and we'll call them now "construction safety specialists" or "certified safety specialists" or whatever we'll call them—we are asking them to plan safety into the job.

The management of people and their actions must rest with the employer. I think there is a problem with the bill, and this was the translation thing that came from the committee to your legislative writers, and the problem is that we think it says that a new person has to be hired with 40 hours of training. I am the first to tell you that is not enough. I have been in it 12 years, and I don't know it all—and I certainly can't design a scaffold; I just know that there is an engineer out there who can, and I know to go and find him.

The point is that the CSS initially was going to be the supervisor. The impact of the bill should be, I believe, that you can't put a man out who supervises that worker. The three men in the ditch in San Francisco—one of them was the boss. He should have had some minimal safety awareness training. He should have been able to pull a card from his pocket and say, I know the principles of safety management, because I was trained, and I am required to have this training in order to be called a foreman, or in order to be called a superintendent, or in order to be called a company owner. That is the principle of the CSS, and I think that is a very important point.

Some people unfortunately will only be motivated by penalties, and it is a financial risk or a criminal risk or a fear of being incarcerated or whatever it is, but we certainly need to have a penalty clause.

And the final management principle, if you will, is that you must plan for safety on your jobs, and I touched on that earlier. This calls for people to sit down at the beginning of a job and say I'm going to have people up high, and you're going to ask yourself how you protect them, and you are going to ask them to write down that I'm going to give them this, or I'm going to do this, or I'm going to train them, and I am going to do something pro-active. And when he signs it, you are going to be pretty sure that he is going to try to do it. And if he has had some level of minimal safety training, safety management training—not training on how to do iron work; we hope that as a supervisor, he's already got some of that—this 40 hours as a minimum should be some level of safety management training.

He will put that into use in a management mode to make his employees comply, and further, he will enforce, because he is afraid, quite frankly, of the accountability side of that.

The management of people is the high-leverage activity. Ninety percent of accidents happen by employee actions—you are right; it is probably more like 95 percent. So this bill needs to address how to manage people on job sites.

And I admit, too, that the NCAs and possibly my company all come into the same realm; we probably don't need this bill. The two pieces of paper that we file, one at the beginning and one at the end of the job—no problem, really. Even if you charge us a fee to get the permit in order to privatize this thing and get some money coming in, I don't think I would object to that—$50 maybe in order to take care of the recordkeeping burden that is going to be put on BLS. But by God, you'll have some statistics that are meaningful at that point.

The contractor that it will impact is the guy who is not spending time here today—he is up there scrambling around right now, trying to get work from me. He doesn't have a safety initiative or a voluntary involvement in the safety process nationwide.

Specifically—and I'll be fast here—we endorse about your bill, and I want you to hear this as a contractor and as a safety professional—we endorse any and all efforts to increase safety training. I again remind you that the construction safety specialist as I see it is the same supervisor who is responsible for the work. If contractors want another specialist, or if a general contractor is to be required to have one guy to sort of oversee all these other operations—not oversee; he should never take it away from them, but in order to enhance, shall we say, or to participate in the safety process on a job site—well, I think that we should make that distinction in the bill, and maybe that's not quite clear. But each contractor—a man with three workers—those workers deserve a level of safety that is greater than what they have now. And because they are small, they don't have the enforcement actions under OSHA today. You know there is an exemption for the ten workers. But they are not exempt from OSHA. OK, they are not exempt from the law. They are only exempt from the inspections, unless they have a fatality. They shouldn't be exempt from this law, either. Their supervisor, he's got 52 weeks a year; every three years or so, we should ask him to go and get some decent training that qualifies him. He doesn't have to go to DesPlaines, Illinois, either, where OSHA has their only training institute. He needs to go to ABC's training program, or AGC's, as they talked about, training program, or ASSE, American Society of Safety Engineers, is developing a construction school. He needs to be trained in a curriculum at the union, perhaps, that is approved by the OSHA minimum. And we can make it available in the first year this is passed; we can make it available in the United States.

We endorse the statistical recordkeeping improvements by BLS and calling out some significant and simplified statistical guidelines that contractors understand. The current recordkeeping requirements are vague, and they are misapplied. I sit on the BLS Advisory Committee—I am the only contractor on it, by the way—and they say we know you are a "bastard child", so to speak. We can't deal with you. We are dealing with industry. And they admit it in their most recent documents where they put out the statistics. There are three comments in the document that was published yesterday that says BLS recognizes that the statistical recordkeeping, the quantifications, are poor.

We endorse the institution of mandatory but simple and fast registration at job sites. And that data base can be used by OSHA and by BLS for statistics and for targeting and for quantifying what contractors and what style of contractor does what, and it might even add to the idea that there is a bad actors' list. You will certainly know how many actors are out there, because we don't know that today.

We endorse the increase of penalties for hazards or for willful disregard. Certainly, if there is something criminal out there, intentional, no one has ever argued that.

We endorse small business training and education outreach. In fact, when a small business registers a job, I think it should be mandatory that OSHA is triggered to send training and information material automatically. If he says I'm small and I don't really know how to dig a trench—if he says I'm getting ready to go and do a trench, OSHA ought to say here is how you do a trench and at least give him some blanket information so he can't say he didn't know.

We endorse the national certification of construction safety specialists only so that there is some continuity, and understand that this is the first step. We don't believe that 40 hours is enough. But we know that you can get there with 40, then maybe 80, then maybe 120, and then maybe someday you'll be able to define what is a real professional safety engineer.

We endorse the requirement for a written safety program. We told you that it is necessary to document what you believe and what you are going to do—and it doesn't have to be reams and reams of paper; it can be ten pages, or one page even, if it is a very small painting contractor per se.

We do not endorse OSHA being responsible for takeover of a job after—the search and rescue certainly sits with better people—but we do believe that OSHA should be able to say, "Stop the job. I

Rather, the high impact activity that shows significant improvement in the construction safety process is management of safety performance within the scope of the construction activity. Prevention of hazards through proper planning and analysis of work to be done, and proper documentation and communication of those efforts is minimal management activity that will yield maximum results.

Having just returned from Europe after two weeks of business development and representing the National Safety Council at the Institution of Occupational Safety & Health in England, I would like to defer the rest of our allotted time for testimony to Mr. Barry A. Cole. Barry is the Manager of both the Construction company and our Construction Safety Consulting company. He, too, is active at the National Safety Council and ANSI Committees and membership in the ASSE. Among his skills of experience, he has been a practicing construction safety professional in managerial capacity in the Construction industry for the last decade.

I appreciate the opportunity to work with you and your staff on this outstanding step forward towards construction safety improvement. We are, of course, ready to assist you and support your efforts in any way we can.

PREPARED STATEMENT OF BARRY A. COLE

I am honored to be here and thank you for the opportunity.

As indicated I am managing two construction safety related firms for SINCO in East Hampton, CT.

Prior to moving to SINCO, I have spent the last 11 years as a contractors' Field Safety Director on small and large contracts and as the Corporate Level Safety Director for a very large general contractor. I have committed my adult life to construction safety.

I am a firm believer that our collective abilities,properly focused can dramatically improve construction safety.

I am a believer of a stair-stepped approach to Construction Safety Improvement, and a realistic and fundamentalist approach. Your Bill (S.B.930) is such an approach.

No one bill will end all accidents but S.B.930 addresses basic tenants of safety management. Our goal, of course, is for the overall common good over the long term.

I was involved with your (Senator Dodd's) Legislative Assistant, Jeff Anders, during the formative stages of your Bill and would like to relay to you my overview and perceptions of those meetings and the resultant S.B.930 from my perspective as both a Safety Professional and a small specialty contractor.

(1) This is a workable compromise. Not only Safety Professionals, but Owners, Construction Managers, Engineers, Union and Non-Union Labor, Small and Large Contractors, and others, were at the meetings. Many of the other points that people wish were in your bill and were brought up today are valid areas to address. But I feel its necessary to stick to basics. Some of the more complex issues should be addressed at later time, perhaps under separate legislation. Most of these issues were addressed in the original meetings and dismissed as one-sided or too complex to tackle while we have a fundamental shortfall of basic safety management principles.

(2) The spirit of the meetings and of this Bill are to start to take care of this fundamental far reaching problem. Implementation of these new requirements will point out other areas that need attention and, as such, this bill and these requirements will be a tool for even further improvement. Congress and OSHA should watch for future opportunities to further enhance OSHA and safety practices in construction. The idea was to "Bunt and Get on Base", rather than try to hit "Home Runs" with sweeping OSHA reform.

(3) The idea of safety as a Management Science is evolving at OSHA and in the USA and this Bill further accelerates and defines these principles. Specifically, "Safety Management" requires that:

a. You must quantify and measure your problems and identify your areas of greatest need.

b. You must address your available resources at the most needy areas.

c. You must have accurate and meaningful statistics from data which are understood by the people generating them.

d. You must have an enforcement system that will realistically and fairly be applied to all and especially be able to reach those who respond primarily only to enforcement action.

e. You must train your educators and enforcers and you must have trained and aware personnel in charge of the workplaces.

need to get on." And they should be able to get on and do an investigation. And further, along with this training of OSHA inspectors, the people they send should be trained for proper and efficient accident investigation and meaningful accident investigation. The fellow who wrote up the cigarette butts in a no smoking zone—he is not a trained inspector, and he needs the training. We need to help him.

We endorse the mandatory inclusion of the Construction Safety and Health Advisory Committee in OSHA reform and in OSHA's policy and standard-setting process, but the bill allows them to have powers that they don't ordinarily have, adj we don't necessarily endorse that part of it. We think they serve best at the behest of a competent assistant secretary and that he should be required to listen to them, and he should convene them frequently.

We appreciate the opportunity to discuss this important subject with you. I am very pleased and honored to be here. We will continue to work with your staff and any of the other associations that we are members of or that we are not members of to bring this thing to some kind of finality and get on with the business of protecting the workers.

Senator DODD. Barry, thank you, and I'm going to state the obvious to Dan: You are a lucky guy. He knows what he is talking about.

I want to thank both of you. I should have said at the outset that you both have been extremely helpful to us in trying to craft a responsible bill. And it is obviously not over with; that is the purpose of hearings and comment and the like. You try and fine-tune, improve, and bring things out. But we wouldn't have gotten this far had it not been for the two of you. Jeff has expressed that view to me, but I wanted the record to reflect it and the people here in the room to know it, that it was tremendously helpful and worthwhile to have some professionals involved in giving us good ideas on where to go and to try and put something together here that made some sense.

So we thank you both for that.

[The prepared statements of Mr. Paine and Mr. Cole follow:]

PREPARED STATEMENT OF DANIEL M. PAINE

Ny name is Daniel H. Paine. I am President of SINC0, Incorporated in East Hampton, CT. We are a safety products manufacturing company specializing in the construction market. In addition, we are the parent company of SINCO Products Inc., which manufactures construction tools and equipment, and SINC0 Construction Services Inc., which performs specialty contracting, and SINCO Construction Safety Services, which provides professional safety consulting for the construction industry. We are intimately familiar with the Construction Safety activities in the United States and remain active in the National Safety Council, the American Society of Safety Engineers, and National Standards Organizations, particularly ANSI A.10 National Safety Standards for Construction Safety.

In general, we consider S.B.930 (and its house equivalent) an excellent first step towards correcting the significant problems that the construction industry has. Speaking as the owner of both a construction firm and a products manufacturer, I would like to go on record as saying that I endorse the principles of the bill. In particular, I think it is important to note that the statistical record keeping requirements will enhance our ability to determine exactly where our Nation's efforts should be focused in the future. Even though we manufacture safety products for the construction industry, we firmly believe that the safety of the construction work force is not found only in products or gadgets that protect against job site hazards.

f. You must have outreach and training available to disadvantaged or small businesses. But you should still expect their managers to be Competent and their employees to be safe.

g. You must have written documentation. Documentation is a management tool; the strongest benefits of documentation are increased awareness by individuals, accountability, and ability to records and gather statistics.

h. Management of people and their actions must rest with the employer and the employer must develop specific programs, instructions and training for his specific needs—but such items should meet a minimum standard so they can be measured and so that the employer (and the employee) has notice of what's expected.

i. That some people will only be motivated by their risk. Financial risk associated with penalties are one way to raise awareness of many by punishing a few. Obviously, this point is not as pro-active as the others but a necessary part of a "global" solution.

j. You must plan for project safety—contractors must ask questions of themselves and their processes with regard to the safety aspects and risk of the work. Once asked, the questions will or should be answered with accident prevention planning.

(4) We are reminded that Safety Management is the high leverage activity that motivates, educates, controls and measures people. People cause hazards. Spelling out what hazards to avoid, with high levels of specificity is what the original OSHA Standards did. This Bill now addresses, with some specificity, how safety should be managed to tell how to avoid them. OSHA now recognizes this and is focusing on performance based standards as well.

(5) The above are generalities. I'd like to address some components of the Bill more specifically.

1. We endorse any and all efforts to increase safety training for OSHA Inspectors, Construction Supervisors and any other interested persons.

a. The Bill should clarify that CSS should be a requirement for each contractor and that a CSS is not necessarily an additional person on site. More important is that a minimal level of safety management awareness is necessary to be considered a competent supervisor. This should be phased in over several years.

2. The statistical record keeping system presently used by BLS is totally inappropriate and ineffective for constructions' needs. We endorse the provisions that mandate OSHA (BLS) to improve data collection through:

a. Improved definitions and clarifications of injury and illness classification.

b. Use of mandatory contractor registrations and safety reporting information.

c. Additional surveys by industry specialty and size classifications which will be possible with this improved data base.

3. We endorse the institution of mandatory but simple and fast registration of projects to allow OSHA to randomly select from a more certain, more timely, and much larger data pool for inspections. Further, once an equitable system for determining higher risk projects and higher risk contractors, OSHA will be able to more equitably and effectively target inspections. As a follow-up, we endorse a mandatory submission of the safety history of the project—in a simplified form to allow the provision of a bill requiring statistical improvement to be possible.

4. We endorse the increase of penalties for hazards and improper management programs but believe recordkeeping violations should be willful only when fraud is evident.

5. We endorse small business and training and education outreach. The project registration could easily, and should, trigger OSHA training and information material automatically sent to registrants.

6. We endorse National Certification of Construction Safety Specialists. This is one area that we believe should evolve to a higher and higher level of excellence and training as the construction safety awareness in our industry increases. Many associations and industry groups have training programs that should qualify.

7. We endorse the requirement for a Written Safety Program (plan). The technical and procedural complexity of each plan should necessarily be determined by each contractor. But a written plan to a minimum standard is important. As part of this safety plan, a documentation of the contractors efforts to identify foreseeable hazards and the planned action to avoid, prevent, or protect employees from those hazards is necessary (Hazard Analyses). Project plans should include disciplinary action plans for those violators who have been trained and properly supervised and managed, but fail to comply with employer requirements.

8. We do not endorse OSHA being responsible to "take over" a jobsite after a serious accident. But we do endorse laws that mandate protection of the scene for reasonable accident investigations and an increase in OSHA's ability to respond to acci-

dents for investigation purposes and the requisite training necessary to be an effective investigator.

9. We endorse the mandatory inclusion of the Construction Safety and Health Advisory Committee in OSHA reform, and policy and standard setting, and a Mandate to the Secretary to convene the committee on a regular basis, but believe the committee should not be empowered to act outside the scope of the guidelines set by the existing statutes and the Assistant Secretary.

We appreciate the opportunity to discuss this important subject and excellent Bill. With minor modifications and wording clarifications we believe the whole committee should endorse it and push for its passage on the floor.

We recommend that you resist pressure to amend it or make it too sweeping or to address special interests or complex issues other than the basic precepts of Safety Management. Too much change, too fast, will not be readily accepted and will disenfranchise the construction community and burden both the industry, the agencies involved and the safety resources of the USA. However, after enactment of this first step, we endorse your continued vigilance to monitor the progress of our industry and the agencies and your being receptive to future enhancements of construction safety efforts that require legislative influence.

We will continue to work with you as you desire and welcome any questions.

Senator Dodd. Matt, we thank you for being here as well.

Mr. Burkart. Thank you, Senator.

It is a pleasure for me to be here. I have enjoyed working with the staff. I have a few comments I'd like to make in addition to the written comments I have submitted.

Generally, I am in complete support of the bill as it is written. I think some of the things that have been said here today need to be commented on.

I have been in the construction industry since 1956, when I stepped on my first paying job as a carpenter. I have been in supervision. I am a registered engineer. I have been involved in construction safety prior to OSHA, starting in 1969. I have investigated most of the major accidents that have occurred in this country. I did not get involved in L'Ambiance Plaza, but I did in Willow Island. And I hope it is not a sign of how soon we forget, but ten years before Willow Island in 1971, about the same number of people lost their lives in a liquid natural gas tank in Staten Island, which was not mentioned.

I have investigated crane accidents with multiple fatalities, tower collapses. These are but a small percentage of the 100,000 dead workers we were talking about this morning.

I don't know how many times through this contractors have told me, "It doesn't apply to me; the standards don't apply." They really didn't understand what their requirements were.

This bill has the provisions—and Barry said he didn't recognize it; that is because it has been changed in name. The registration of the projects has been referred to here today as a targeting industry type thing. That is not what it is. It is a way to communicate with the contractors who are out there, to gather statistics, and I don't view it as a punishment or a target for people to have the wrath of OSHA fall on them. It is a means to communicate with the guy that has a backhoe and three men working for him, to provide him the assistance, the help, the training, to keep his three men out of the trench so that we don't have to dig them out like we did out in San Francisco.

This registration will allow us to get the statistics that we need. We have heard all through today, and in fact in the group before us, I belong to two of the three organizations that were represented—they don't have the statistics to make the recommendations, and the bill will give it to them.

This is where we need to gather—before we make the exemptions—get the statistics, and determine where we are having our accidents.

If you look at the injuries that we have, the Bureau of Labor Statistics just recently put out in 1988, and they say we have an incidence rate of 14.7. That's a very nice number. That is the injuries per 100 workers per year. You are injuring 14 percent of your work force every year. It reflects the number of injuries that two and a half men are going to have in a 40-year working career. At the current rate, we are getting three or four injuries per man per career.

Good contractors brag about a frequency rate of six, which is roughly half of what we are looking at for the average. Some of the better contractors have demonstrated they can reduce that two or three times if they have the incentive.

The things that these people do are what we are requiring them to do in this legislation, and I think we will see a corresponding reduction in these injury and frequency rates because of that.

We don't need to accept 14-15 as an injury rate as part of our normal course of operations.

This bill, in summary, in my perspective was designed to solve problems which everybody here has talked about today. We have identified the problems and provided solutions for most of them. We haven't addressed all of them, and there are a lot of issues that were put forth that are not addressed in this program. But the ones that are being addressed are the ones that need to go forward.

Thank you.

Senator Dodd. Thank you very much, Mr. Burkart, and your expertise and knowledge are also extremely appreciated, and I want you to know that.

And I hear you—and again, it seems that we are stating the obvious—but obviously, without the data base here—I was quoting NIOSH on the relationship between drug abuse and fatal accidents, but it hardly touches on the problem of nonfatal accidents, which can be dreadful, of course—so there are so many things we need to get—obviously, small contractor difficulty with safety management. I don't know how you draw a conclusion about that unless you get some sense in the data base of what you are dealing with.

It is always frustrating to me. I face this a lot of times when people will object to a piece of legislation—and they may be right; I'm not suggesting they are wrong—but they do so on the basis of what they think it is apt to be like rather than really getting a sense of what the real world is like. And the real world is that since we started out with this hearing at 9:30 this morning, and it is almost 1:30, based on the statistics, two people in this country have lost their lives on a construction site since we started. And maybe they were unavoidable accidents. It sounds like an oxymoron when I say that, but maybe they were just the kinds of things that no matter what we did, we couldn't have prevented—and maybe they were preventable; maybe we could have prevented them. I mean, the 100,000 fatalities since 1970 in the construction industry is a dreadful number. What would the number have been like had there not been any OSHA? I can't tell you that, except that I know that in the absence of some effort here to try and get a better handle on safety, we are watching people lose their lives unnecessarily. And that is all this legislation is designed to do.

I'll be the first to admit had it not been for the L'Ambiance Plaza issue, I probably wouldn't be sitting here. I don't like to even admit that to you. But it takes a dreadful situation like that to get the attention of some of us on this side of the dias. Other than the Jessica McClures, who fall down a well and captivate the attention of an entire world, usually, ironically, in this particular area, it is not the individual case that gets attention; it is the dramatic case. So it provoked Congressman Shays and myself to want to do something here.

It has been a long time since we started this effort. We didn't introduce a bill back in 1987. We have gone through a process that we think has been helpful and constructive, and we are not through it yet, obviously, but we think we have put together a pretty good bill. I see friends of ours still here from organized labor, and I'd say it in their absence, but since there are here, I'll say it as well, and that is they have been tremendously cooperative on this, tremendously cooperative, and really were more interested in something not substantially different than what we are dealing with. There were some very good people from the contractors who have come forward and have made some excellent suggestions as well. Of course, those of you in the safety field are really particularly important because you know this area so well.

So we are looking forward to an ongoing dialogue here. We have finished a very important day. It has been a long day, and I apologize to all of you. But I thought it would be worthwhile to try and complete it in one day rather than stretc.h it out over several days.

We are now going to be inviting additional comment, refining a bit, talking to some additional people. Obviously, we are not going to be doing anything before the holiday season this year, but we'll come back in January, and my intention is to ask the chairman of the full committee and others to examine the issue and to try and move forward and start to set some mark-up dates and get some additional involvement in this so that we can have a bill that can move along.

I don't think the case has been made that we don't need to do anything. That for sure has not been made. People may have some additional ideas on how we refine this and make it a better bill and a more reasonable bill, if you will, but my intention is to move forward with this legislation. So I again want to thank all three of you and the other witnesses today for being here.

Mr. Paine. Senator, one final point. The fairness issue keeps coming up, and I think one of the things behind the fairness issue is this business of statistics, because an awful lot of things go on, and an awful lot of people make all kinds of claims, and without those statistics and without legislation, you are not going to get those statistics.

I think that is issue number one, and then I think issue number two is that you've got to, again trying to keep it fair, get that down to a low enough level, small enough contractor, to find out where your problems are. I would suspect from the data that I have seen that maybe not the dramatic accidents, but the large number of people killed, are not killed by large contractors but probably in the small—two, three, four-man—operations.

Senator **Dodd**. And repeaters of problems, which I thought was interesting, and we heard that today.

Mr. **Paine**. Yes.

Senator **Dodd**. Again, I am stating the obvious, but again for the record, hearings like this do not happen accidentally. A piece of legislation does not emerge miraculously. It happens because members of Congress like myself and Congressman Shays have exceptionally bright and talented people who work for us. And we get all the attention. It will be my name that appears in print in a news story, and possibly my face on the television screen, or my voice on a radio station, and many people may never hear the names Jeff Anders or Patty McGovern. But the record should reflect that without their involvement, their efforts, I wouldn't be sitting here, and none of us would have been involved in this issue at all to the extent we have been. So I want the record to reflect my deep appreciation to Jeff of my staff, and I know I speak for Congressman Shays and certainly myself, when I express my gratitude to Patty McGovern as well on his behalf for her efforts on this legislation.

Mr. **Burkart**. Senator, the gentleman from the National Society of Professional Engineers, in the group before us, made an offer of assistance, talking with the construction safety specialist. I think the organization—and there has been some work done on putting together qualifications for these people—with that organization's assistance to develop registration guidelines for each of the individual States, as they do for other criteria, would be very helpful to the cause and construction safety.

Senator **Dodd**. We'll follow up on that immediately.

Again, thank you for your patience here and waiting to be the last panel, and particularly the Connecticut folks—the last shall be first, or something like that, biblically, is reflected along the way.

[Additional statements and material submitted for the record follow:]

PREPARED STATEMENT OF THE ASSOCIATED BUILDERS AND CONTRACTORS

Mr. Chairman, Associated Builders and Contractors (ABC) shares your concerns about construction safety and appreciates this opportunity to comment on your bill S. 930, the "Construction Safety, Health, and Education Improvement Act of 1989."

However, we also share the opinion of the National Forum on Construction Safety and Health Priorities, commissioned by the National Institute for Occupational Safety and Health, that "the construction industry does not need more legislation to alleviate its problems (in S&H)." In this regard, ABC's comments will focus on our efforts to improve safety in the construction industry, some observations on how your bill addresses safety in construction and some suggested recommendations for S. 930.

ABC is the fastest-growing non-profit, national association in today's construction market because it represents companies that are part of a major industry trend, the merit shop. ABC represents over 18,000 general contractors, subcontractors, suppliers and associates in more than 89 chapters across the nation. ABC has seen merit shop construction grow to an impressive 75 percent share of all construction. Today, we are proud of the fact that over one-third of the ENR Top 400 construction companies participate in ABC. At ABC, safety is synonymous with savings—saving lives by the use of proper management procedures and saving resources through the prevention of job site accidents. ABC is proud of its record in safety. We have consistently received high honors, for example, from the Business Round Table (BRT) for our construction safety programs. This year ABC received a $50,000 award and swept all categories in the BRT's 1989 construction awards. ABC recognizes that loss prevention activities are of primary importance for contractors and their employees, and has developed materials to help members create and maintain safe, profitable projects. In addition, ABC has established the only Construction Safety Management Academy in the construction industry. This academy is an intensive 6-day program offered by ABC in conjunction with Clemson University.

The academy is designed to primarily benefit home office "safety coordinators" and key field safety technicians who have not had the opportunity for formal safety instruction (copy of schedule is attached).

The instructors for the Safety Management Academy were selected on the basis of (1) field experience in companies, (2) legal ramification of claims administration and, most importantly, (3) ability for designing and implementing construction safety management programs.

Registration for the academy is open to all who can benefit from the education programming—open shop, closed shop and non-members.

In addition, ABC now offers a Project Managers Academy and a Supervisor's Academy. Both week-long programs have extensive safety curricula. All three programs have graduated a total of 423 students since 1988.

With this as background, we would like to make specific comments on the "Construction Safety, Health, and Education Improvement Act of 1989."

S. 930 would: require contractors to hire "construction safety specialists" or other employees to be responsible for the overall safety of projects; require employers to have written safety and health programs; require all supervisors and employees to obtain general safety and health training; require OSHA to develop procedures for determining whether the required training had been provided; require on-site construction safety and health plans; require OSHA to create a Construction Safety and Health Training Academy which would certify construction safety specialist; train OSHA construction inspectors; and enter into cooperative agreements with educational institutions, state governments, labor unions, and employers to train workers to be work site construction safety specialists.

Generally, ABC feels the bill has a fundamental problem in addressing the contractual relationship between general contractors and subcontractors. The definition of contractor and employee in the legislation literally makes all subcontractors employees of the general. This contractual misunderstanding also extends to the penalties section of the bill. The bill requires criminal penalties for certain violations, but it is uncertain whom these penalties would be directed at, that is, who goes to jail, the contractor, the president of the company, the board of directors of the company, the foreman or who? We would also suggest that these penalties are duplicitous in light of the fact that criminal penalties can already be brought against contractors if OSHA so desires.

ABC also feels that any construction safety bill must contain worker accountability provisions. The unfortunate facts are that unsafe work practices by employees, not unsafe working conditions, cause most accidents on work sites. Studies by E.I. du Pont de Nemours & Co. estimate that 90 percent of all work place injuries are caused by "unsafe acts" by workers; a BLS study shows that nearly 70 percent of all chemical burns were classified as injuries caused by worker errors; and statistics from the Construction Safety Association of Ontario, Canada, indicate that 68 percent of all work injuries involve unsafe employee behavior. Without employees taking responsibility for their own actions, no amount of safety education will ever be totally effective. ABC would suggest that fines must be passed on to the employees when they are responsible for the violation. If not, we are ignoring the prime cause of accidents.

Mr. Chairman, in the area of accountability, we want to emphasize that OSHA presently permits the employer to implement his own penalties relative to safety violations as long as they meet OSHA's standards. In this regard, our concerns with S. 930 are two-fold. One, in light of the contractor's ability to implement safety programs and penalties for violations of those programs, we see the safety requirements in the bill as unnecessary. Secondly, it is unclear as to whether the provisions in the bill would preclude the employer from implementing his own essential safety programs or not.

Mr. Chairman, our next matter of interest is drug use. As you know, drug use is a contributing problem related to construction health and safety. Companies that conduct drug tests on employees after accidents have found that 40 percent of those employees tested positive. A 1987 survey by the Construction Industry Institute found that some 10 percent of the employees of one construction company had some form of substance abuse problem. Other studies show that approximately 20 percent of the construction work force may have a substance abuse problem. If we are to be serious about construction safety, we must have the ability and option to test for drug use when there is probable cause and after an accident occurs on the work site.

S. 930 creates a new "Office of Construction, Safety, Health, and Education" to "ensure safe and healthy working conditions in the performance of construction work." ABC finds this proposed office another unnecessary bureaucratic level of government. Since OSHA already requires separate standards for the construction industry, we see no need for more standards, separate offices within OSHA or more bureaucracy. As a matter of fact, as a result of recent criticism and congressional pressure, OSHA created an Office of Construction, Maritime, and Health Engineering Support on Sept. 26, 1988, to investigate accidents, provide day-to-day technical expertise for the agency's field office and national office, and conduct in-depth studies of recurring problems. According to Charles G. Culver, Director of the office, "The office would do what NIST (National Institute of Standards and Technology) did." Further, the office is not "sitting around waiting for the next accident to happen," but rather is responding to regional offices' questions and is locating "trends and characteristics of accidents to identify ways to improve safety in . . . construction," according to Culver. This sounds strikingly similar to the mission of the Office of Construction, Safety, Health, and Education created in S. 930.

The establishment of a Construction Safety Specialist whose curriculum for certification will come from the Office of Construction, Safety, Health and Education is another issue we would like to address. A majority of ABC members and a majority of all contractors are small businesses. As required in the bill, the cost of hiring, retaining and training a CSS would be virtually impossible for small business contractors. Additionally, employers would have difficulty finding workers to serve as safety specialist because the job would be loaded with liability. We also would suggest some clarifying language in the bill regarding whether or not a CSS is required to be present at all times at every construction site. We have submitted to your staff, language that would allow for contractors to contract-out the use of CSSs. In this way, both of our safety concerns in your bill could be met, and our cost problems could be met as well.

Another issue we have with the bill regarding small contractors is the additional regulatory burdens placed on these businesses. In our opinion, this is informational overload. We do not see how these regulatory requirements will save lives or how they will be implemented. For example, we fail to understand how providing "the estimated total costs of the project for labor and material, including labor and material for work performed by subcontractors" will do anything towards making the construction industry any safer. As a practical matter, ABC thinks that the requirement for an "Emergency Evacuation Plan" and an "Onsite Construction Safety and Health Plan" cannot be implemented on an ever-changing work site. Further, a small company with three employees for example, could hardly afford to draw-up such a plan or implement it. Again, we would agree with the National Forum on Construction Safety and Health that "Concerning the present state of regulatory overload, a five year moratorium on new regulations . . . for streamlining and simplifying of the existing regulations and safety standards" be adopted. We have submitted language to your staff which would allow for regulatory relief from the requirements of the bill if a certain history of compliance and safety can be demonstrated by the employer. what we are emphasizing is measuring safety by results instead of regulation.

In conclusion, Associated Builders and Contractors shares your concerns about health and safety in the work place. However, we do not believe that additional punitive legislation is necessary. Increasing punitive measures towards the employer do nothing to protect the worker and do nothing to promote a cooperative effort between OSHA, employers and employees.

SAFETY ACADEMY
CLEMSON UNIVERSITY
November 12 - 19, 1989

TIME	SUBJECT	ACTIVITY	LOCATION	OBJECTIVE	INSTRUCTOR
Sunday, Nov. 12, 1989 1:30/5:30 PM	Arrival	Check in at ABC reception desk	Greenville/ Spartanburg, SC, Airport	Transport arrivals by van to Clemson University Clemson, SC	ABC Staff
7:00/9:30 PM	Dinner/ reception	Welcome	Kresge Hall (Dining Facility)	Students will have opportunity to socialize and get acquainted. Program schedule and administrative information to be provided.	ABC Staff
Monday, Nov. 13, 1989 6:30/7:15 AM	Breakfast		Kresge Hall		ABC Staff
7:30/8:30 AM	Pre-test	Student Examination	Classroom	To evaluate student skill level at beginning of program. This is a non graded examination.	ABC Staff
8:30/9:30 AM	Introduction	Lecture/ Discussion	Classroom	Week at a glance. Profile participants. Introduce course objectives. Discuss the history of safety movement.	Mike Frenzel Associated Safety Consultants, Inc. Baton Rouge, LA
9:30/10:30 AM	Elements of a Safety Program	Lecture/ Discussion	Classroom	Introduction to and discussion of the key elements of a classic safety program. Examine the Model Safety Program. Establish a philosophical safety foundation for the remainder of the week.	Mike Frenzel
10:30/12:00 PM	Todays Trends in Safety	Lecture/ Discussion	Classroom	Examine and discuss the significance of the Business Roundtables A-3 report, and the Phase III report.	Mike Frenzel
12:00/1:00 PM	Lunch		Kresge Hall		ABC Staff
1:00/2:30 PM	Accident cost direct v. indirect	Lecture/ Discussion Exercise	Classroom	Discussion of Accident Cost. Direct vs. Indirect. Examine a typical construction accident and calculate the cost involved.	Mike Frenzel

TIME	SUBJECT	ACTIVITY	LOCATION	OBJECTIVE	INSTRUCTOR
2:30/4:30 PM	Accident Investigation	Lecture/ Discussion Exercise	Classroom	Define an accident and the benefits of accident investigation. Consider who should conduct the accident investigation. Contrast the difference between an investigation and a report. Learn how to evaluate/audit accident investigations. Discuss accident trends/trend analysis.	Mike Frenzel
4:30/5:30 PM	Introduction to OSHA	Lecture/ Discussion Exercise	Classroom	Consider the origin of OSHA. Contrast State vs. Federal programs. Introduction to the OSHA Standard. Hide and seek exercise.	Mike Frenzel
6:00/7:00 PM	Dinner		Kresge Hall		ABC Staff
7:00/9:00 PM	OSHA and other regulatory agencies	Lecture/ Discussion Exercise	Classroom	Discuss what triggers an OSHA inspection. What to do when the Compliance Officer comes and a citation is issued. Explore the difference between recordable and nonrecordable accidents. Recordable accident exercise. Compare MSHA and OSHA. Highlight DOT regulations.	Mike Frenzel
Tuesday, Nov. 14, 1989 6:30/7:15 AM	Breakfast		Kresge Hall		ABC Staff
7:30/8:30 AM	Loss Exposures & Risk Management	Lecture/ Discussion	Classroom	The student will be introduced to Risk Management. Learn about the Risk Management process. Pre and post loss objectives, techniques for treating loss exposures and conflicts of economy vs. anxiety - external obligations and social responsibility.	Thomas Walston, II Walston & Associates Smyrna, Georgia
8:30/9:30 AM	Risk Transfer/ Contractual	Lecture/ Discussion	Classroom	Class will discuss hold harmless agreements - indemnity - subrogation - need for adequate insurance of others - owners - generals - subs - certificates of insurance for cost control - E.R.M. in the bidding process - contractual problem areas: Responsibilities - owners - general - subcontractor - sub sub contractor - contractual risk management tips.	Tom Walston

TIME	SUBJECT	ACTIVITY	LOCATION	OBJECTIVE	INSTRUCTOR
9:30/10:30 AM	Introduction to Insurance - 3rd Party Liability - Professional	Lecture/ Discussion	Classroom	The volatility of insurance - Cost and coverage availability - information available from insurers - tort liability - commercial general liability coverage - owners/contractors protective - railroad protective - special problems with joint ventures - completed operations - claims made vs. occurrence - punitive damages - aggregates - special endorsements available - additional insureds and care, custody and control exposure - turn key exposures - nurses - EMT - first aiders	Tom Walston
10:30/11:15 AM	Automobile - Contractors Equipment Data Processing	Lecture/ Discussion	Classroom	Student will learn about proper auto policy to cover all vehicles by symbol 1 - employee use of personal or company vehicles - the proper rating territory - how to insure contractor's equipment - data processing	Tom Walston
11:15/12:00 PM	Builder's Risk Coverage Fidelity/ Crime	Lecture/ Discussion	Classroom	Student will have an overview of these insurance coverages with emphasis on contractor's exposure under builder's risk policies	Tom Walston
12:00/1:00 PM	Lunch		Kresge Hall		ABC Staff
1:00/3:30 PM	Workers' Compensation	Lecture/ Discussion	Classroom	Student will receive a composite of the Workers' Compensation laws in all states and overview how to use it - How Worker's Compensation works. How the experience rating modification works - why it is important to check it - proper code classification - charges for subs without certificates - no monopolistic state funds - self insuring Worker's Compensation - second injury reimbursements - assigned risk penalties - the effect of good claims administration - light duty work - termination of employees	Tom Walston
3:30/4:30 PM	Risk Financing	Lecture/ Discussion	Classroom	Students will understand the basics of guaranteed cost insurance - dividend programs - retrospective rating and cash flow plans	Tom Walston
4:30/5:15 PM	Group Approach	Lecture	Classroom	Student will learn about group programs and pools - risk retention groups and wrap-up programs	Tom Walston
5:15/6:00 PM	Service Procedures/ Summary and Conclusions	Lecture	Classroom	How to select an agent or broker. The value of an outside safety consultant. HPR Engineering Consultants The Risk Management Consultant.	Tom Walston

TIME	SUBJECT	ACTIVITY	LOCATION	OBJECTIVE	INSTRUCTOR
NOTE: Additional topic if time permits	Two Theories on Accident Causes and Effects	Lecture/ Discussion	Classroom	Student will learn of Heinrich's Domino Theory and Haddon's Energy Release Theory as a lead in to the remaining program.	Tom Welsion
6:00/7:00 PM	Dinner		Kresge Hall		ABC Staff
7:00/9:00 PM	Administration & Policies	Lecture/ Discussion	Classroom	Student will learn the principles involved in development of goals and objectives which are consistent with those of the Safety Academy. Will learn the relationship between management commitment and an effective safety program. Will prepare a policy statement which will define management statement. Will learn techniques of establishing safety responsibility, role definition and accountability. A brief overview of drug and alcohol screening will be presented. This topic will be explored in depth in later sessions.	Don Neslund Safety & Loss Control Assoc. Prospect Heights, Illinois
Wednesday, Nov. 15, 1989 6:30/7:15 AM	Breakfast		Kresge Hall		ABC Staff
7:30/9:00 AM	Employee Selection, Education & Training	Lecture/ Discussion & Presentation of Orientation Video	Classroom	The Student will learn the importance of training and education, in-house seminars, Tool Box Talks, motivation, OSHA's training requirements, adult learning techniques, importance of documentation, and training material resources. Will learn the importance of new employee orientation and worker compensation injury screening. Students will learn how to utilize task hazard analysis when preparing an employee training program.	Don Neslund
9:00/11:00 AM	Hazard Recognition, Inspections, and Audits	Lecture/ Discussion Workshop	Classroom	The student will learn to understand the importance of inspections (identifying and recognizing hazards) as an emphasized part of any safety program. Will learn the different types of inspections needed, guidelines to aid the person in determining the frequency of each type and how to monitor their effectiveness.	Don Neslund
11:00/12:00 PM	Hazard Recognition	Group Activity	Classroom	Participants will review a series of actual jobsite slides to sharpen their hazard recognition skills.	Steve Powers Professional Safety Associates Denham Springs, Louisiana
12:00/1:00 PM	Lunch		Kresge Hall		ABC Staff

TIME	SUBJECT	ACTIVITY	LOCATION	OBJECTIVE	INSTRUCTOR
1:00/2:30 PM	Enforcement & Discipline Recognition & Incentives	Lecture/ Discussion of Student's Experiences	Classroom	Students will learn the principles of developing and enforcing safe work rules, a company discipline policy, the pros and cons of recognition/incentive programs, and the use of incidence and severity rates.	Don Neslund
2:30/4:00 PM	Management Control Techniques	Lecture/ Discussion	Classroom	Participants will learn how to use the Behavior Based Safety approach to improve their firm's safety performance. Emphasis will be placed on the need for basic supervisory skills training.	Steve Pereira
4:00/6:00 PM	Employee Screening, Selection & Placement	Lecture/ Discussion	Classroom	Participants will see how poor employee screening and selection procedures can impact on safety performance. They will learn various techniques to improve their firm's screening and placement procedures.	Steve Pereira
6:00/7:00	Dinner		Kresge Hall		ABC Staff
7:00/9:00	Medical, First Aid & Emergency Planning	Video/ Lecture/ Discussion	Classroom	Participants will recognize the need for and learn how to develop Emergency Reporting & Response Procedures for jobsite emergencies including those which involve dealing with outside agencies and members of the press. Students will also learn how to select and deal with local physicians and medical personnel.	Steve Pereira
Thursday, Nov. 16, 1989 6:30/7:15 AM	Breakfast		Kresge Hall		ABC Staff
7:30/9:00 AM	Recordkeeping	Lecture/ Discussion/ Exercise	Classroom	Participants will learn the importance of recordkeeping, what has to be kept and for how long. Employee access to medical and exposure records will be addressed. Students will learn to calculate OSHA incidence rates. Segment will cover medical records, accident reports and inspection reports.	Steve Pereira
9:00/11:00 AM	Operational Program Procedures	Lecture/ Discussion	Classroom	The student will learn how to develop operational procedures that can be job site specific. Will learn the usefulness of a pre-job safety analysis, pre-job hazards identifiers, administrative/engineering controls and physical protection.	Don Neslund
11:00/12:00 PM	Short Range Planning	Lecture and Student Exercise	Classroom	The student will learn the purpose of short range planning for review of future work with safety in mind, the ability to evaluate hazards in future work, and evaluate the hazards involved in a specific job site task.	Don Neslund

TIME	SUBJECT	ACTIVITY	LOCATION	OBJECTIVE	INSTRUCTOR
12:00/7:00 PM	**Lunch Recreation Dinner**		Kresge Hall	This will be the mid week break for the students. Lunch 12:00/1:00 PM. Dinner 6:00/7:00 PM.	ABC Staff
7:00/9:00 PM	**Hazard Analysis Evaluation & Control**	Lecture/ Discussion	Classroom	Participants will review the process of hazard control including the evaluation of degrees of risk, hazard consequences, probability of loss and control measures.	Steve Pereira
Friday, Nov. 17, 1989 6:30/7:15 AM	**Breakfast**		Kresge Hall		ABC Staff
7:30/9:00 AM	**Hazard Analysis Case Study**	Group Activity	Classroom/ Cabin	Participants will use the pre-job planning checklist to evaluate the hazards associated with an actual job and develop necessary plans to control their exposure to potential loss.	Steve Pereira
9:00/10:00 AM	**Hazard Analysis Case Review**	Group Activity/ Slide Review	Classroom	Participants will present their findings on the Case Study and then review slides taken on the job in question.	Steve Pereira
10:00/11:00 AM	**Review Site Information**	Observation/ Discussion	Classroom	Students will review actual construction site information of job sites in question.	Steve Pereira
11:00/12:00 PM	**Current Safety & Environmental Issues**	Lecture/ Discussion	Classroom	An overview of the Federal Hazard Communications Program will be presented. Students will learn the basic requirements for preparation of a written program, site substance inventory, the importance of the Material Safety Data Sheet(s), labeling/relabeling, and training requirements along with documentation.	Don Neslund & Steve Pereira
12:00/1:00 PM	**Lunch**		Kresge Hall		ABC Staff
1:00/2:00 PM	**Current Safety & Environmental Issues**	Video and Class Discussion	Classroom	An opportunity for students to discuss in detail their specific questions concerning the Hazard Communication Standard.	Don Neslund
2:00/3:00 PM	**Alcohol & Substance Abuse**	Lecture/ Discussion Video tape	Classroom	Participants will learn how alcohol and substance abuse are affecting the Construction Industry and what can be done to combat the problem.	Steve Pereira

TIME	SUBJECT	ACTIVITY	LOCATION	OBJECTIVE	INSTRUCTOR
3:00/4:30 PM	**Current Safety & Environmental Issues**	Lecture/ Discussion	Classroom	Participants will be given an overview of the Federal Underground Storage Tank Requirements, Hazardous Waste Regulations and Community Right to Know laws	Steve Pereira
4:30/6:00 PM	Pro-active Safety Management vs Reaction Management	Lecture/ Discussion	Classroom	Participants will learn various techniques for evaluating and modifying their safety activities before major problems occur as opposed to reacting to problems after the fact. Techniques for dealing with top management and first line foremen will be discussed.	Steve Pereira
6:00/7:00 PM	Dinner		Kresge Hall		ABC Staff
7:00/8:00 PM	Resources	Discussion and Experience Sharing	Classroom	Students will learn the various resources available to them to effectively design, prepare and implement a construction safety program.	Don Neslund
Saturday, Nov. 18, 1989 6:30/7:15 AM	**Breakfast**		Kresge Hall		ABC Staff
7:30/8:30 AM	Program Review & Adjustment	Lecture/ Discussion/ Student Feedback	Classroom	Students will learn how to use the tools and information available to audit the effectiveness of their safety program. The tools and information will include management feedback, insurance data, self inspection, audit reports, etc.	Don Neslund
8:30/9:30 AM	Program Review	Question & Answer Session	Classroom	Participants will be given the opportunity to ask questions concerning the material presented to date. Key points from the Hazard Analysis, Alcohol and Substance Abuse and Environmental Issues segments will be reviewed.	Steve Pereira
9:30/10:00 AM	MSPP Introduction	Lecture/ Discussion	Classroom	Participants will learn to use the ABC MSPP Audit form to evaluate their safety and loss prevention activities.	Steve Pereira & Don Neslund
10:00/12:00 PM	MSPP Work Up	Individual Exercise	Cabin	Each participant will evaluate their firm's safety program, identifying strengths, weaknesses and target areas for improvement.	Steve Pereira & Don Neslund
12:00/1:00 PM	Lunch		Kresge Hall		ABC Staff
1:00/3:30 PM	MSPP Student Presentations	Individual Presentation Discussion	Classroom	Each participant will present a summary of their audit findings noting the strengths, weaknesses and target areas for review and/or improvement.	Steve Pereira & Don Neslund

TIME	SUBJECT	ACTIVITY	LOCATION	OBJECTIVE	INSTRUCTOR
3:30/4:30 PM	Post Test	Student test covering all course material	Classrooms	To measure students progress. This test will be evaluated against the pre-test.	ABC Staff
4:30/5:30 PM	Evaluations	Student Critique	Classroom	Students will be given evaluation forms to critique the instructors and program.	ABC Staff
7:00/9:30 PM	Formal Dinner		Kresge Hall	Final dinner for students.	ABC Staff
Sunday, Nov. 19, 1989 6:30/7:30 AM	Breakfast		Kresge Hall		ABC Staff
8:00 AM	Travel to airport	Return students to airport	Greenville/ Spartanburg Airport	Prepare students for return home	ABC Staff

PREPARED STATEMENT OF THE SHEET METAL AND AIR CONDITIONING CONTRACTORS' NATIONAL ASSOCIATION, INC.

The Sheet Metal and Air Conditioning Contractors' National Association, Inc. (SMACNA) is supported by more than 5,000 construction firms engaged in industrial, commercial residential, architectural, and specialty sheet metal and air conditioning contracting throughout the United States. SMACNA contractors employ hundreds of thousands of construction workers and maintain a long-standing history and record of achievements in establishing and maintaining sale and healthy workplaces.

OVERALL COMMENTS

While many of the provisions of the "Construction Safety, Health and Education Improvement Act of 1989" aim in spirit to enhance workplace safety, certain provisions evidence a lack of a thorough understanding of the intricacies and varieties of the construction process wherein relationships and procedures can vary greatly according to the kind, size and relative risk of a project.

SMACNA believes that as a unified goal, worker safety in construction must be based on commitment and accountability of both the employer and employees. Unfortunately, the bill as introduced contains no provisions for employee accountability despite its call for severe punitive measures against one segment of the construction safety team, the employer. Employee accountability is extremely important, especially with study after study revealing that 60% or more of workplace injuries are a result of employee unsafe acts.

SPECIFIC COMMENTS

The following constructive comments are intended to encourage further refinements to this bill:

OFFICE OF CONSTRUCTION SAFETY, HEALTH AND EDUCATION

While SMACNA has consistently encouraged OSHA to recognize the special processes involved in the construction industry, the creation of another bureaucratic entity is not the proper means for OSHA to develop further comprehension and recognition of the realities of the construction industry.

In September 1988 OSHA created an Office of Construction, Maritime and Health Engineering Support whose charge, in part, was to monitor and investigate accidents, provide technical assistance and expertise to the OSHA field offices, and conduct in-depth studies of recurring accidents and problems. Creating yet another office to regulate construction as proposed in S. 930 when the office created in September 1988 has yet to implement its charge is clearly unnecessary and would be wasteful overkill.

INSPECTIONS, INVESTIGATIONS, REPORTING AND RECORDKEEPING

Many of the provisions of the bill pertaining to inspections, investigations, reporting and recordkeeping would greatly increase the administrative burden of the subcontractor and sub-subcontractor. 'While the added paperwork responsibilities under the bill appear to be related to the construction contractor and its construction safety specialist, many additional reports and recordkeeping requirements would flow down from the construction contractor to the subcontractor and sub-subcontractor. SMACNA believes that added paperwork burdens have little relationship to increased jobsite safety and health.

SMACNA contractors, as the result of their varied expertise in all aspects of sheet metal and air conditioning contracting, enter into construction contracts with one of three representatives—the owner, or the general contractor, or the subcontractor. Under the bill their reporting and recordkeeping responsibilities would not only increase substantially but would also change dramatically depending on whether the contractual relationship was with the owner, general contractor or subcontractor. Given the variety of construction projects under operation with different contractual relationships, the nature and extent of the sheet metal contractors reporting and recordkeeping requirements would differ greatly from job to job—with such added unproductive time a very real and unnecessary diversion from the primary focus which should be workplace safety.

ON-SITE CONSTRUCTION SAFETY AND HEALTH PLANS

The requirements of on-site construction safety and health plans, construction process plans and hazard analyses fail to recognize the variety in size, scope and complexity of construction projects. Those same requirements would apply equally to a small direct bid of a sheet metal contractor for a job lasting two weeks and to a general contractor on a multi-million dollar project lasting years. The bill's requirements are unrealistic and fail to recognize the varied complexities related to the scale and type of a project.

CONSTRUCTION SAFETY SPECIALIST

The qualifications and certifications of the bill's requirements for a safety specialist are not consistent with the vast responsibilities required of that position. In terms of the authority vested in that position, SMACNA questions whether such authority can be properly exercised given the variations in contractual relationships. Where an owner enters into a contract with multiple firms (as many as 30 or 35) there could be an equal number of construction safety specialists. Where a construction manager or design engineer acts as an agent for the owner, there is the same potential for similar numbers of construction safety specialists. Which construction safety specialist would have authority over which?

INCREASED PENALTIES

SMACNA believes that efforts toward more effective construction safety should not be overshadowed by additional penalties. Any claim of inadequate enforcement of existing penalties by OSHA should be addressed without resorting to additional punitive measures to existing penalties. To date there is no evidence which supports the concept that increased penalties result in safer and healthier workplaces.

CONCLUSION

SMACNA is most concerned with the issue of workplace safety and health and believes that education, training, commitment and some form of employee accountability are the ingredients for success. SMACNA does not view the provisions of S. 930 to be supportive of these ingredients. Instead, S. 930 represents an attempt to establish another layer of bureaucracy which will impede the needed progress toward safer and healthier workplaces.

Senator DODD. The committee stands adjourned until further call of the chair.

[Whereupon, at 1:17 p.m., the committee was adjourned.]

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